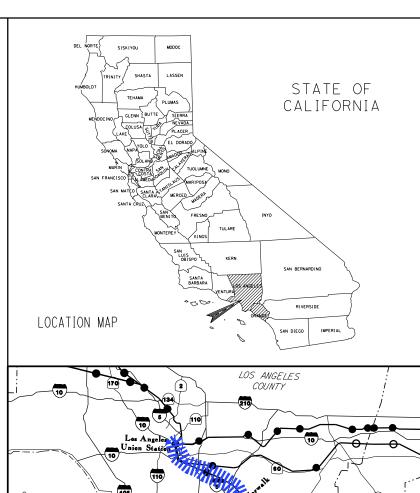
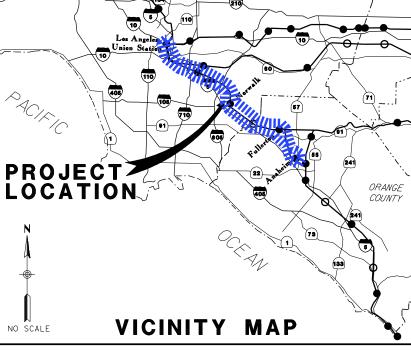


CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES SEGMENT





NOT FOR CONSTRUCTION FOR INTERNAL USE ONLY

10% DESIGN
IN-PROGRESS REVIEW
FEBRUARY 13, 2009

						DESIGNED BY J. MARTINEZ
						DRAWN BY J. MARTINEZ
						CHECKED BY
						P. YANKEY IN CHARGE
						D. THOMSON
REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

BASELINE ALIGNMENT

TITLE SHEET AND VICINITY MAP

	ACT NO). 06-0005	
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	В	0100	
SCALE			
	AS	SHOWN	
CHEET	NO		

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			53	T0232	BASELINE ALIGNMENT PLAN AND PROFILE	101	T0280	FULLERTON STATION OPTION 1 ALIGNMENT
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50	T0229	BASELINE ALIGNMENT PLAN AND PROFILE						
								FOR INTERNAL USE ONLY
		DESIGNED BY J. MARTINEZ			C	ALIFORNI	A HIGH SPEE	ED TRAIN PROJECT CONTRACT NO.

J. MARTINEZ DRAWN BY J. MARTINEZ CHECKED BY
P. YANKEY CHARGE . THOMSON REV DATE BY SUB APP DESCRIPTION 02-13-09





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

ALIGNMENT / OPTION

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	DRAWING NO. BO101
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) !() [); \$\$			Income I	235	S0244	BASELINE ALIGNMENT VIADUCT #6				
\$\$\$\$. 🗸 !			234	S0243	BASELINE ALIGNMENT VIADUCT #6				AL USE ONLY
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P. YANKEY CHARGE CHOMSON 02-13-09

DESCRIPTION

EMGINEERS/ARCHITECTS/PLANNERS/CONSTRUCTION MANAGERS
1055 WEST SEVENTH STREET, SUITE 3150
LOS ANGELES, CA 90017-2556



INDEX OF DRAWINGS

005 SCALE AS SHOWN

SHEET NO. 3 OF 245

	ACRONYMS A AFFECTED AGENCY AACE ASSOCIATION FOR THE ADVANCEMENT OF COST ENGINEERING MDT AVERAGE ANNUAL DALLY TRAFFIC AAR ASSOCIATION OF STATE HIGHWAY TRANSPORTATION OFFICIALS ACSTALL CONCRETE; ALTERNATING CURRENT ACI AMERICAN CONCRETE INSTITUTE ACHP ADVISORY COUNCIL ON HISTORIC PRESERVATION (FEDERAL) ACR ASSEMBLY CONCURRENT RESOLUTION ADA AMERICAN SUNTH DISABILITIES ACT (FEDERAL) ADT AVERAGE DALLY TRAFFIC ASE APPEARANCE INFORMATION SHEET AC ASPHALT CONCRETE CASE APPEARANCE INFORMATION SHEET AC ASPHALT CONCRETE CASE ADVISORY COUNCIL ON HISTORIC PRESERVATION (FEDERAL) ASSEMBLY CONCRETE CASE ADVISORY COUNCIL ON HISTORIC PRESERVATION (FEDERAL) ACIST ASSEMBLY CONCRETE CASE ADVISORY COUNCIL ON HISTORIC PRESERVATION (FEDERAL) ACIST ASSEMBLY CONCRETE INSTITUTE ACID AMERICAN SHIP DISABILITIES ACT (FEDERAL) ADAAGA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES ADT AVERAGE DALLY TRAFFIC ASE ARCHITECTURAL AND ENGINEERING ACC AERIAL EARTH (GROUND) CONDUCTOR ALIS APPEARANCE INFORMATION SHEET ALSC AMERICAN INSTITUTE OF STEEL CONSTRUCTION ANAC APPROACHING NOISE ABATEMENT CRITERIA ANSI AMERICAN NOTIONAL STANDARDS INSTITUTE APEA AL QUIST-PROLIO CANTHOUNE FAULT ZONE AND AMERICAN SOCIETY OF CIVIL ENGINEERIN AMERICAN SOCIETY OF CIVIL ENGINEERING AND AMERICAN SOCIETY OF CIVIL ENGINEERY AT AMERICAN SOCIETY OF CIVIL ENGINEERY AT AMERICAN SOCIETY OF CIVIL ENGINEERY AT AMERICAN SOCIETY OF CIVIL ENGINEERY BET BUS RAPICE DESIGN APECTICE BDS BRIDGE DESIGN AND DRAFTING CALLETAN AIR ACT AMEROMENTS (FEDERAL) CONPUTER-AIDED DRAFTING OF TRANSPORTATION CAME COMPUTER-AIDED DRAFTIMENT OF TRANSPORTATION CAME	CDF C-E CE1. CE2. CEC CEG CEOA CES CFR CFS CGB CHD CHST F TIP G GBR-B GBR-C GDR GIS GMA GO GSHA GO GSHA HD HDM HDM HDM HPSR HO HPSR HO HPSR HO HSR HO HSR HO HSR HSR HO HSR HSR HST HV HW HWMP I A IBC ICFA IGR IMP IRR IRRS ISA ISRM ISTEA ISTEA ISTEA ISTEA	CLOSED CIRCUIT TELEVISION COLLECTOR-DISTRIBUTOR CHST DESIGN CRITERIA CALFORNIA DEPARTMENT OF FORESTRY (STATE) CONSTRUCTION EVALUATED CATEGORICAL EXCLUSION (FEDERAL) CATEGORICAL EXCLUSION (FEDERAL) CATEGORICAL EXCLUSION (FEDERAL) CATEGORICAL EXCREMENT COMMITTEE (OBSOLETE) CERTIFIED ENGINEERING GEOLOGIST CALIFORNIA ENVIRONMENTAL QUALITY ACT (STATE) CUSTOMER EMERGENCY STATIONS CODE OF FEDERAL REGULATIONS CHST FACILITY STANDARDS CALIFORNIA GEOLOGICAL SURVEY COUNTY HEALTH DEPARTMENT CALIFORNIA DEPARTMENT OF HIGHWAY PATROL (STATE) CALIFORNIA HIGH-SPEED TRAIN FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM (FEDERAL) GEOTECHNICAL BASELINE REPORT GEOTECHNICAL BASELINE REPORT FOR BIDDING GEOTECHNICAL BASELINE REPORT FOR CONSTRUCTION GEOTECHNICAL BASELINE REPORT FOR CONSTRUCTION GEOTECHNICAL BASELINE REPORT FOR MIDDING GEOTECHNICAL BASELINE REPORT GEOGRAPHIC INFORMATION SYSTEM GROUND MOTION ANALYSIS GENERAL ORDER GEOGRAPHIC INFORMATION SYSTEM GROUND MOTION ANALYSIS FHWA GEOTECHNICAL TECHNICAL GUIDANCE MANUAL HARD DRAWN HIGHWAY DESIGN MANUAL HIGH DENSITY POLYETHYLENE HAZARD ELIMINATION SAFETY PROGRAM (FEDERAL) HIGH-SPEED TRAIN HIGH-OCCUPANCY VEHICLE HIGHWAY PLANTING AND RESTORATION HISTORIC PROPERTIES SURVEY REPORT CALTRANS HEADOUARTERS HIGH-SPEED RAIL HIGH-SPEED RAIL HIGH-SPEED TRAIN HIGH VOLTAGE HAZARDOUS WASTE MANAGEMENT PLAN INTERNATIONAL BUILDING CODE INTERSTATE COMPLETION PROGRAM (FEDERAL) INTERSTATE MAINTENANCE PROGRAM (FEDERAL) INTERSTATE COMPLETION PROGRAM (FEDERAL) INTERSTATE COMPLETION PROGRAM (FEDERAL) INTERSCIONAL ROAD SYSTEM PROGRAM (STATE) INTERMODAL SURFERE	LADWP LAP LAOMD LAUS LCC LCCA LDBE LEDPA LEQ LOC LOS LOTB LRT LSA LTC LUSAS LV M M MCE METS MHHW MIS MMM MOA MOU MPPI/MPH MPO MSA MTD MTMC MW N N N N N N N N N N N N N N N N N N	LOCAL AGENCY AUTOMATED PAY SYSTEM LOS ANGELES DEPARTMENT OF WATER AND POWER LANDSCAPE ARCHITECTURE PROGRAM, OF THE DOD(CAL LOCAL AIR QUALITY MANAGEMENT DISTRICT LOS ANGELES UNION STATION LOCAL COASTAL COMMISSION LIFE CYCLE COST ANALYSIS LOWER-LEVEL DESIGN BASIS EARTHQUAKE LEAST ENVIRONMENTALLY DAMAGING, PRACTICABLE AIR EQUIVALENT SOUND LEVEL LOCALLY FUNDED STATE HIGHWAY PROJECTS LEVEL OF SERVICE LOSS OF TEST BORINGS LOAD AND RESISTANCE FACTOR DESIGN LIGHT RAIL TRANSIT LOW SUN ANGLE LOCAL TRANSPORTATION COMMISSION CIVIL ENGINEERING ANALYTICAL SOFTWARE LOW VOLTAGE METER MAXIMUM CONSIDERED EARTHQUAKE OFFICE OF MATERIALS ENGINEERING AND TESTING SERVICES (CALTRANS HQ) MEAN HIGHEST HIGH WATER MAJOR INVESTMENT STUDY MILLIMETER MEMORANDUM OF AGREEMENT MEMORANDUM OF AGREEMENT MEMORANDUM OF UNDERSTANDING MILE POST MILLES PER HOUR METROPOLITAN PLANNING ORGANIZATIONS MANAGEMENT SYSTEMS ACTIVITIES MEMO TO DESIGNERS MILITARY TRAFFIC MANAGEMENT COMMAND (FEDERAL) MESSENGER WIRE NATIONAL AMBIENT AIR QUALITY STANDARDS NOISE ABATEMENT CRITERIA NORTHBOUND NOISE BARRIER SCOPE SUMMARY REPORT NEGATIVE DECLARATION (CEQA) NATIONAL EARTHQUAKE HAZARDS REDUCTION PROGRAM NATIONAL HIGHWAY SYSTEM NATIONAL HIGHWAY SYSTEM PROGRAM (FEDERAL) NATIONAL HIGHWAY SYSTEM PROGRAM (FEDERAL) NATIONAL HIGHWAY SYSTEM PROGRAM (FEDERAL) NATIONAL HIGHWAY SYSTEM NOTICE OF PREPARATION (CEQA) NATIONAL HIGHWAY SYSTEM OTHER HIGHWAY CONSTRUCTION PROGRAM (STATE) ON-THE-JOB TRAINING OFFICE OF DETERMINATION (CEQA) NATIONAL HIGHWAY SYSTEM OTHER HIGHWAY CONSTRUCTION PROGRAM (STATE) ON-THE-JOB TRAINING OFFICE OF FOREPERATION OF THE BESC (CALTRAI OPERABILITY PERFORMANCE LEVEL OFFICE OF STRUCTURE FOUNDATIONS, OF THE BESC) OFFICE OF STRUCTURE FOUNDATIONS, OF THE BESC) OFFICE OF STRUCTURE FOUNDATIONS, OF THE BESC) OFFICE OF STRUCTURE FOUNDATIO	MENT NS HO) GATIONS (CALTRANS NGATIONS (CALTRANS N	CALTRANS PROJECT DEVELOPMENT PROCEDURES MANUAL T PROJECT DEVELOPMENT TEAM DESIGN UNIT WITH PROJECT DEVELOPMENT WORKFLOW TASKS MANUAL DESIGN UNIT WITH PROJECT DEVELOPMENT WORKFLOW TASKS MANUAL PROJECT ENGINEER PRELIMINARY ENVIRONMENTAL EVALUATION PROJECT ENGINEER PROJECT ENVIRONMENTAL WALUATION PROJECT ENVIRONMENTAL WHACT REPORT CHAPTER PROGRAMMATIC ENVIRONMENTAL WHACT REPORT CHAPTER PROJECT INSTITUTION OF STEMS AND ANALYSIS PROJECT HISTORY FILE PROJECT INFORMATION SYSTEMS AND ANALYSIS PROJECT INFORMATION SYSTEMS AND ANALYSIS PROJECT MANAGEMENT CONTROL SYSTEM PROJECT MANAGEMENT CONTROL SYSTEM PROJECT MANAGEMENT PROCEDURES MANUAL PROJECT MANAGEMENT PROCEDURES MANUAL PROJECT MANAGEMENT TEAM PROJECT MANAGEMENT TEAM PROJECT MANAGEMENT TEAM PROJECT MANAGEMENT TO SYSTEM PROJECT MANAGEMENT TEAM PROJECT MANAGEMENT TO SYSTEM PROJECT TRUDY SYSTEM PROJECT SUCHEMENT OF SYSTEM PROJECT SUCHEMEN
. VLA-B-VIIO-AUGII 2/12/2009	CBDM CALIFORNIA DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL CCC CALIFORNIA COASTAL COMMISSION (STATE) CCEM CAPITAL COST ESTIMATING METHODOLOGY CCEP CAPITAL COAT ESTIMATING PROGRAM CCEWG CAPITAL COST ESTIMATING WORKING GROUP CCJPA CAPITAL CORRIDOR JOINT POWERS AUTHORITY CCO CONTRACT CHANGE ORDER CCS CALIFORNIA COORDINATE SYSTEM	J JPB K KP KPA KPH/KPH L L A	JOINT POWERS BOARD KILOMETER POST; KILOMETRIC POINT KILO PASCAL KILOMETERS PER HOUR LOS ANGELES (CALIFORNIA, USA); LOCAL AGENCY; LANDSCAPE ARCHITECT	P C J P B P D	(OBSOLETE) PERSONAL COMPUTER PORTLAND CEMENT CONCRETE PROJECT CHANGE REQUEST PIEZOCONE PENETROMETER TEST PENINSULA CORRIDOR BOWNES BOARD PROJECT DEVELOPMENT FHWA PROJECT DEVELOPMENT AND DESIGN MANUAL	ALIFORNIA HIGH	NOT FOR CONSTRUCTION FOR INTERNAL USE ONLY I SPEED TRAIN PROJECT HSR06-0005 DRAWING NO.
wings\c.v	CHECK P. N	MARTINEZ CKED BY YANKE HARGE	STV Incorporated ENGRERS/AROHTECTS/PLANDERS/CONSTRUCTION MANAGERS 1055 WEST SEVENTH STREET, SUITE 3150 LOS ANGELES, CA 90017-2556		CALIFORNIA HIGH SPEED RAIL AUTHORITY		LINE ALIGNMENT SCALE NO SCALE

...\Drawings\CW\OLA-B-0110-Adan martin|

REV DATE BY SUB APP

STV Incorporated
EMMERS/MONITCIS/PM/MARES/CONSTRUCTION MAMAGES
1055 WEST SEVENTH STREET, SUITE 3150
LOS ANGELES, CA 90017-2556

CHARGE

THOMSON

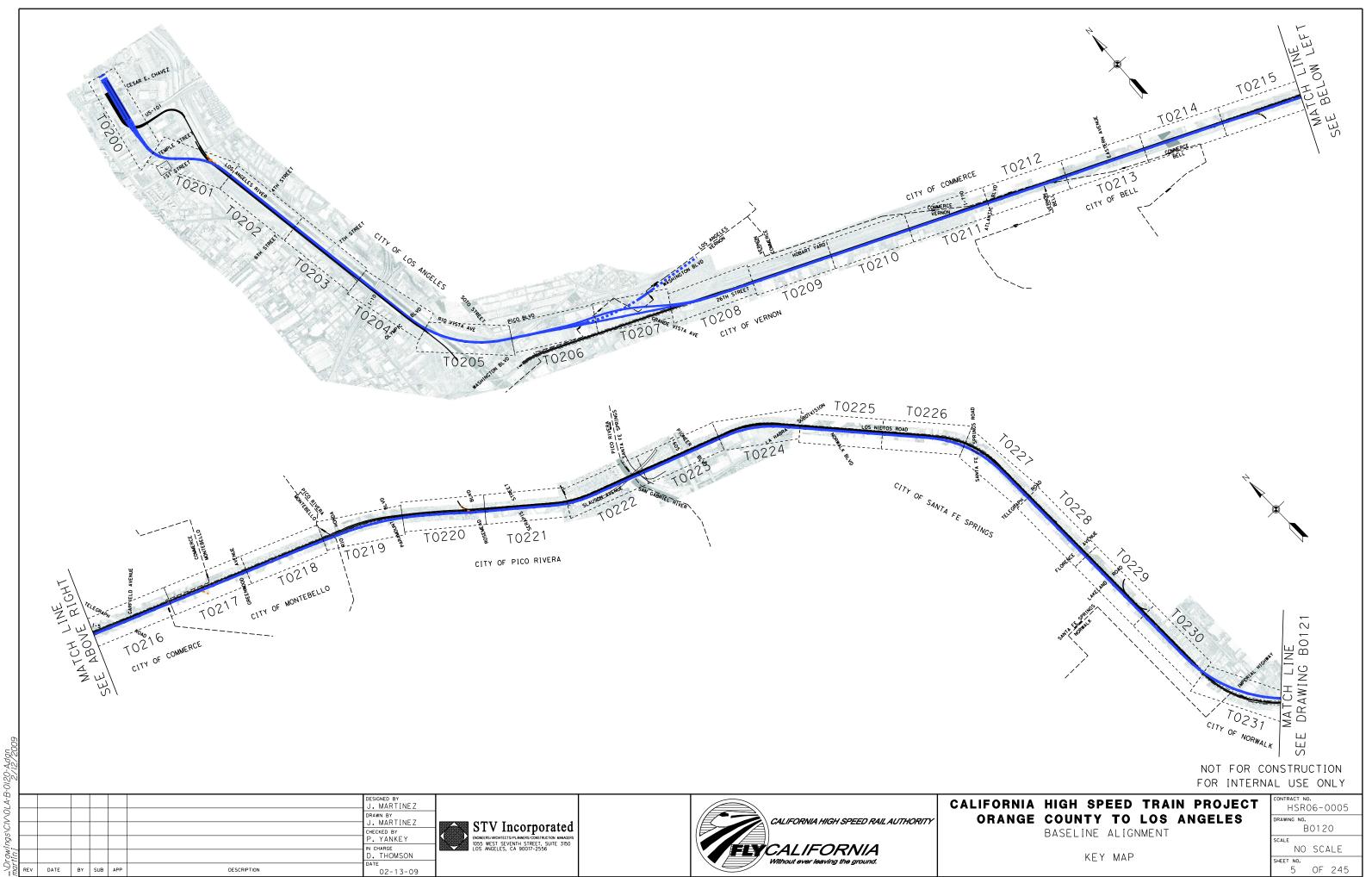
02-13-09

DESCRIPTION



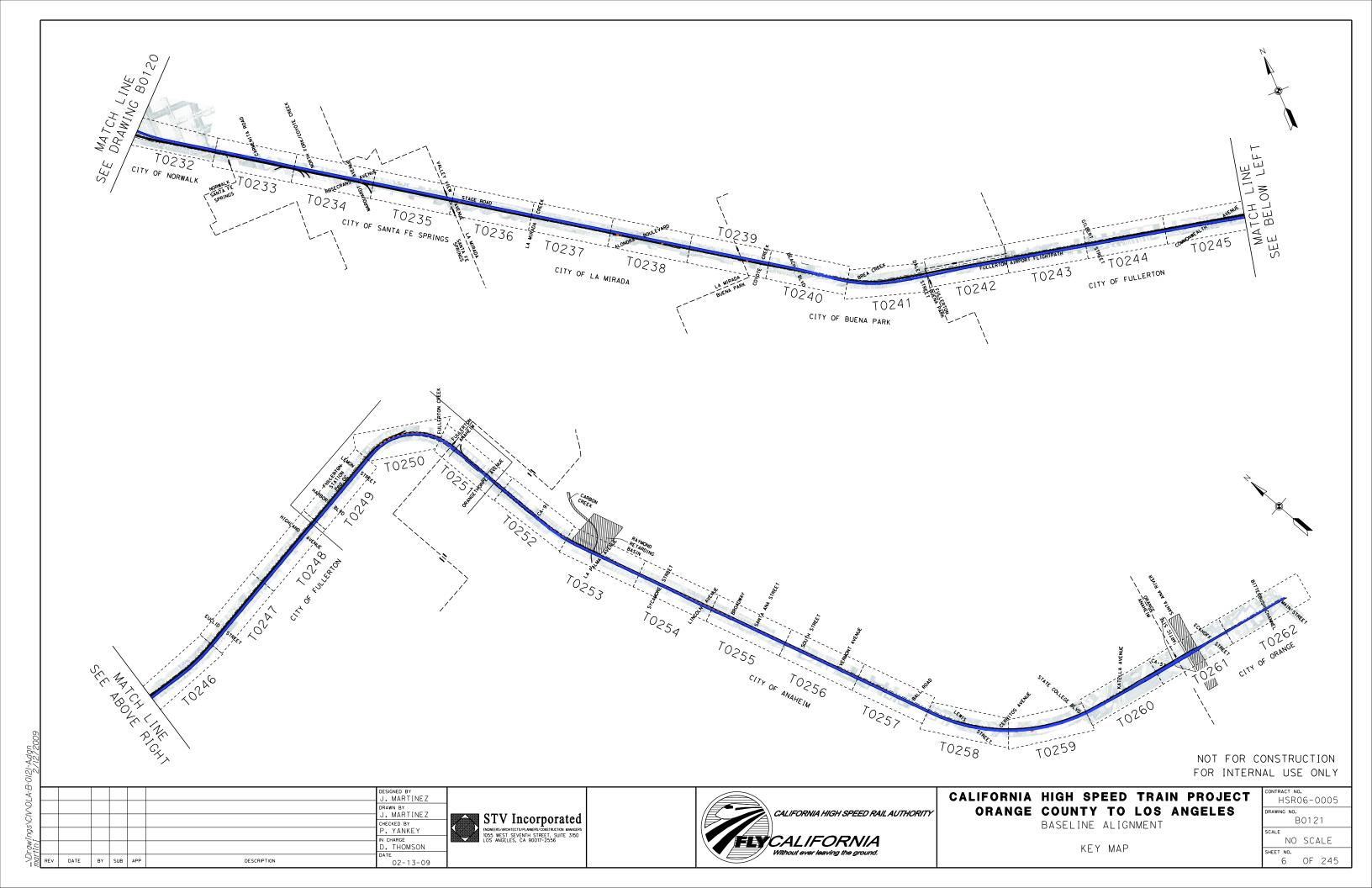
GENERAL SYMBOLS AND ABBREVIATIONS

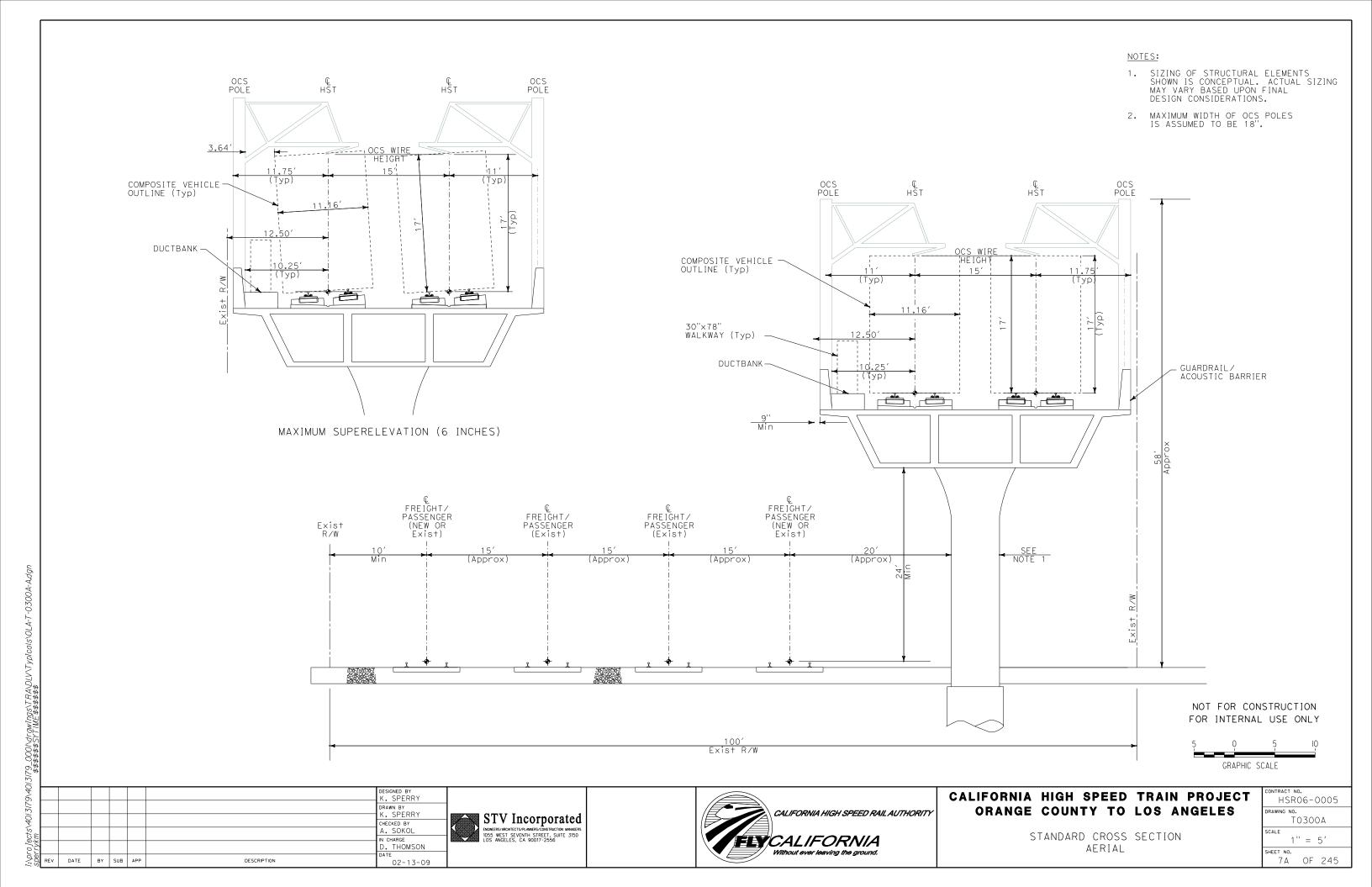
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SHEET NO.			
4	OF	245	
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DESCRIPTION 02-13-09



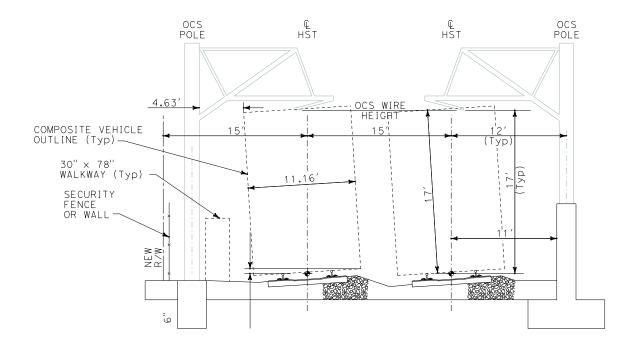




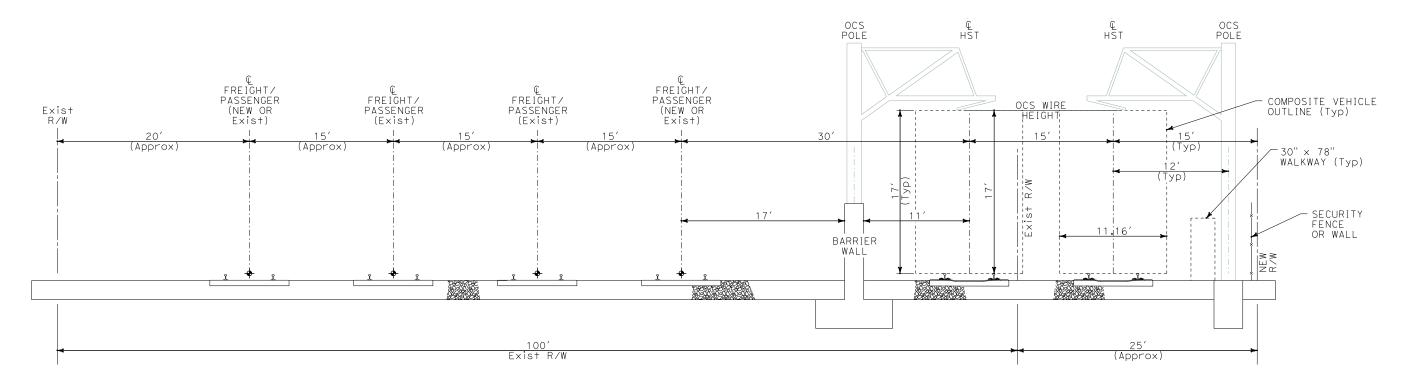
- 1. SIZING OF BARRIER WALL SHOWN IS CONCEPTUAL. ACTUAL SIZING MAY VARY BASED UPON FINAL DESIGN CONSIDERATIONS.
- 2. MAXIMUM WIDTH OF OCS POLES IS ASSUMED TO BE 18".

NOT FOR CONSTRUCTION FOR INTERNAL USE ONLY





MAXIMUM SUPERELEVATION (6 INCHES)



DESIGNED BY
K. SPERRY
DRAWN BY
K. SPERRY
CHECKED BY
A. SOKOL
IN CHARGE
D. THOMSON
DATE
BY SUB APP
DESCRIPTION
DESCRIPTION
DESCRIPTION
DESCRIPTION
DESCRIPTION
DO 2-13-09



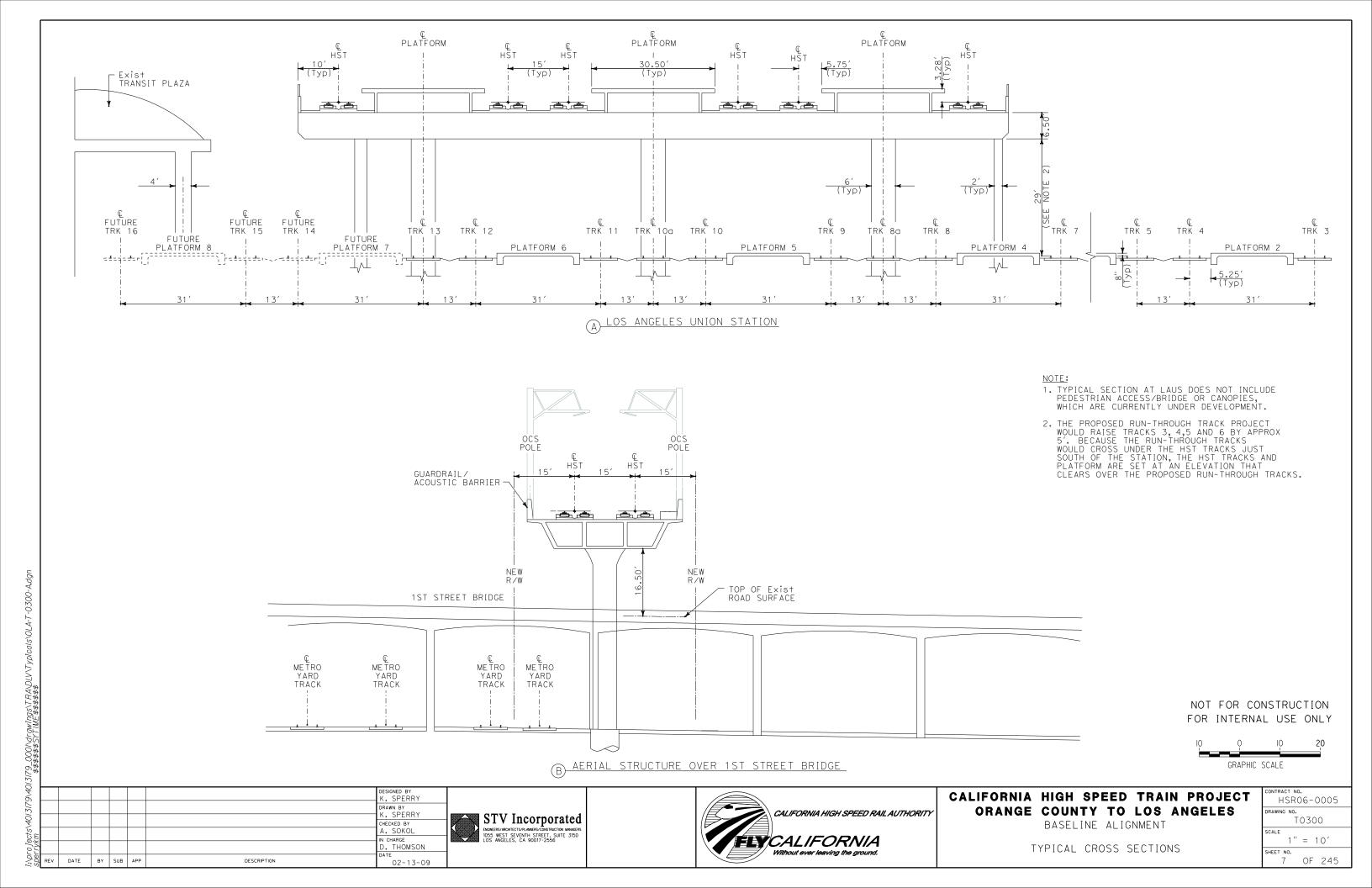


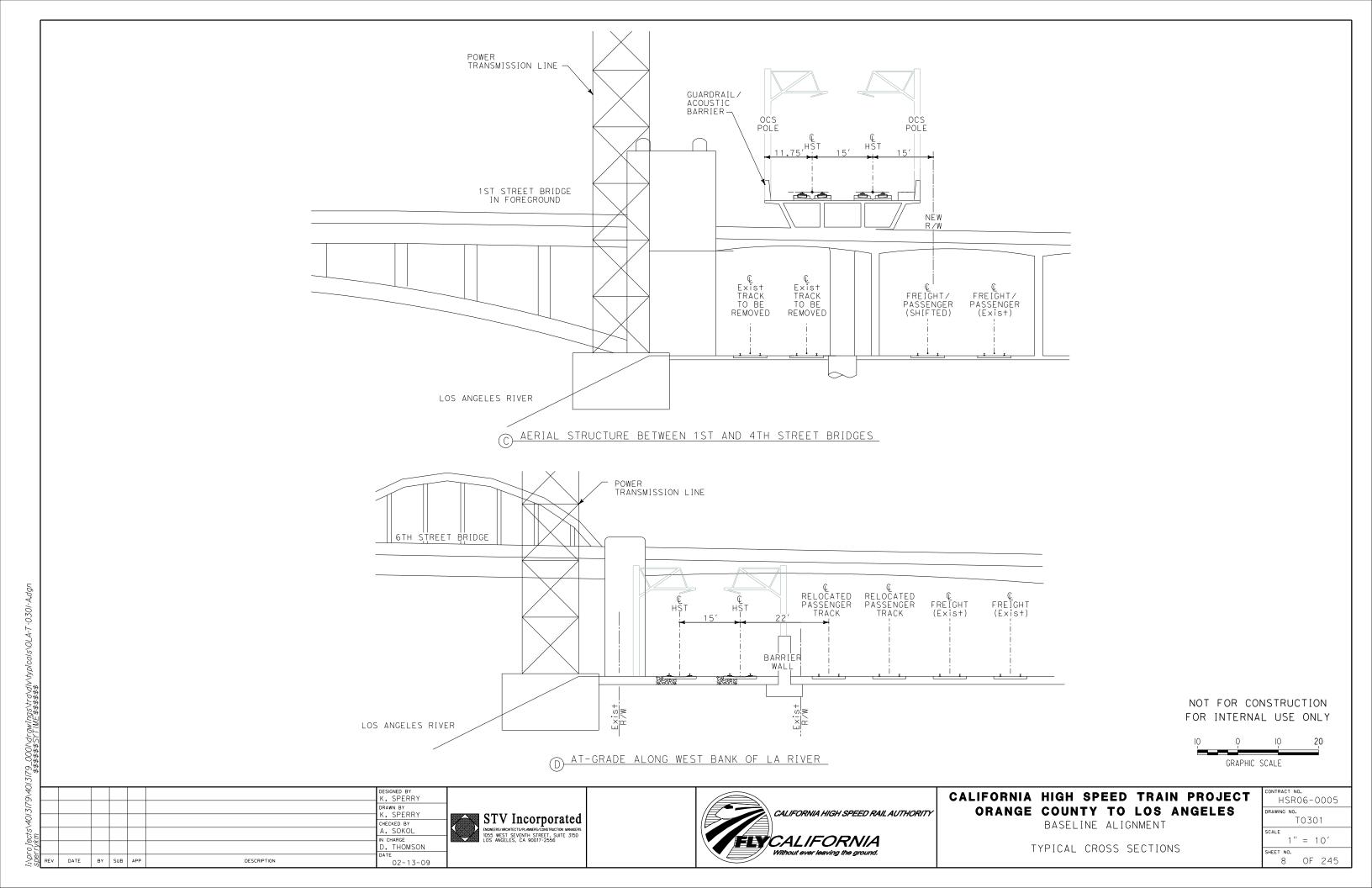
CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

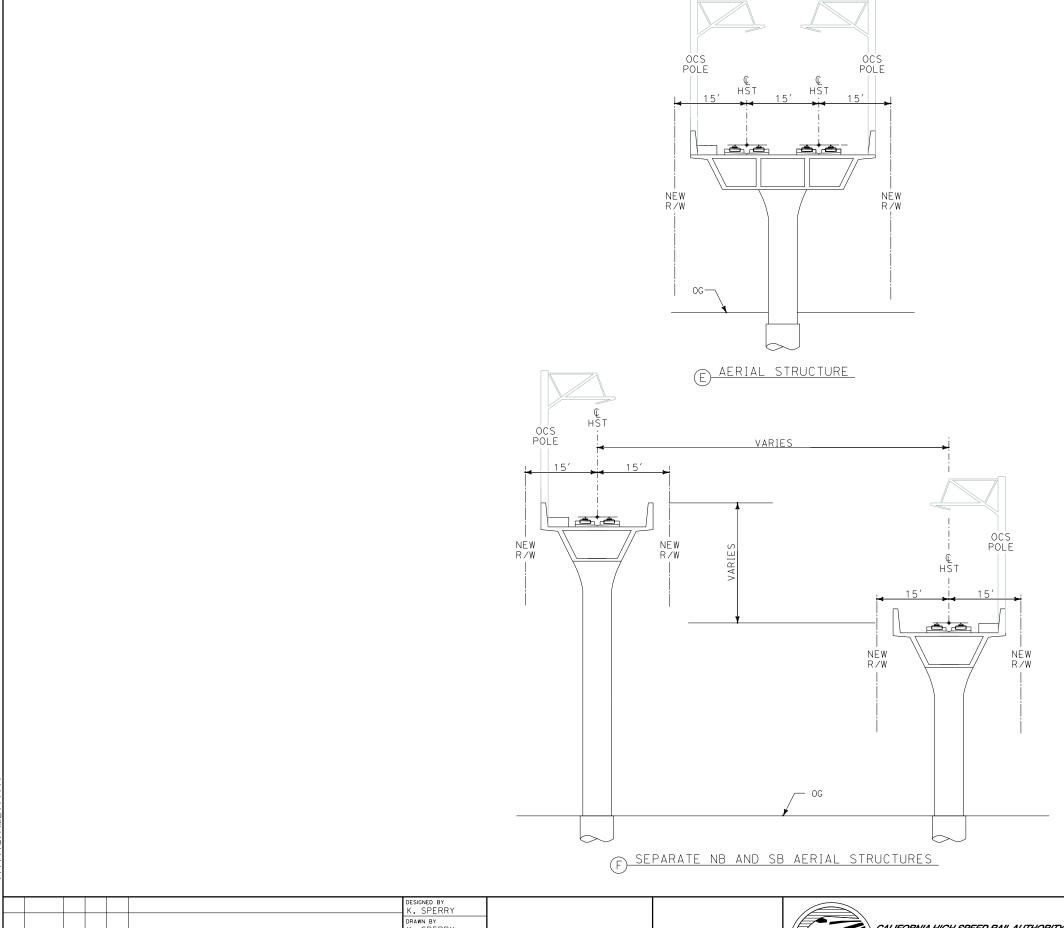
STANDARD CROSS SECTION AT-GRADE

CONTRACT NO.
HSR06-0005
1131100 0003
DRAWING NO.
T0300B
103000
SCALE
1" = 5'
- 5
SHEET NO.
7B OF 245
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JSAUJI YAUJI YAUJUN ZOUNATOMINOSNI KANDLV NIYPICOISNULA-I -UJUUB-AJO \$\$\$\$\$\$\$\TIME\$\$\$\$\$\$







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| DESIGNED BY | K. SPERRY | DRAWN BY | K. SPERRY | DRAWN BY | K. SPERRY | CHECKED BY | A. SOKOL | IN CHARGE | D. THOMSON | DATE | BY SUB APP | DESCRIPTION | DATE | O2-13-09



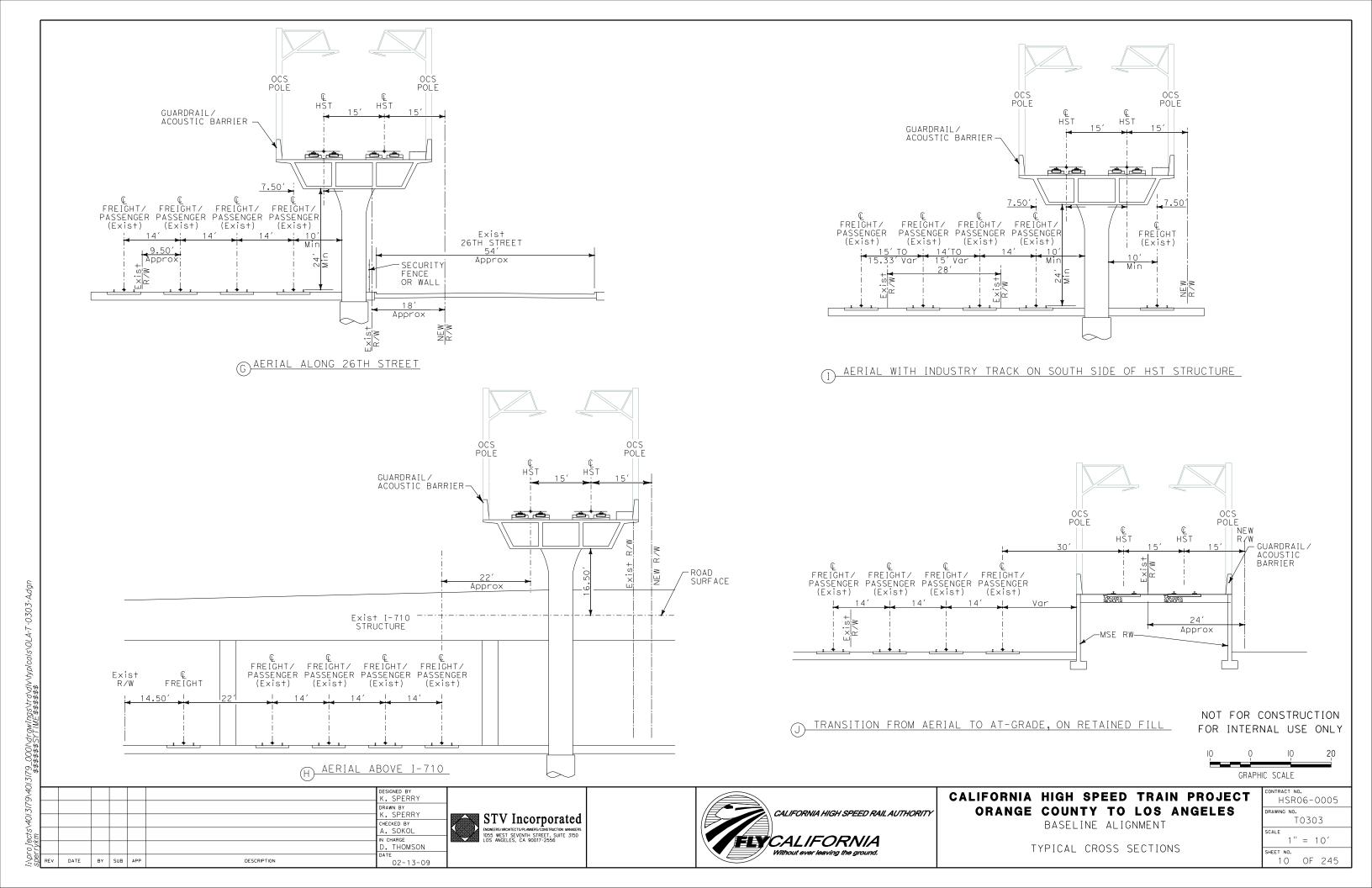


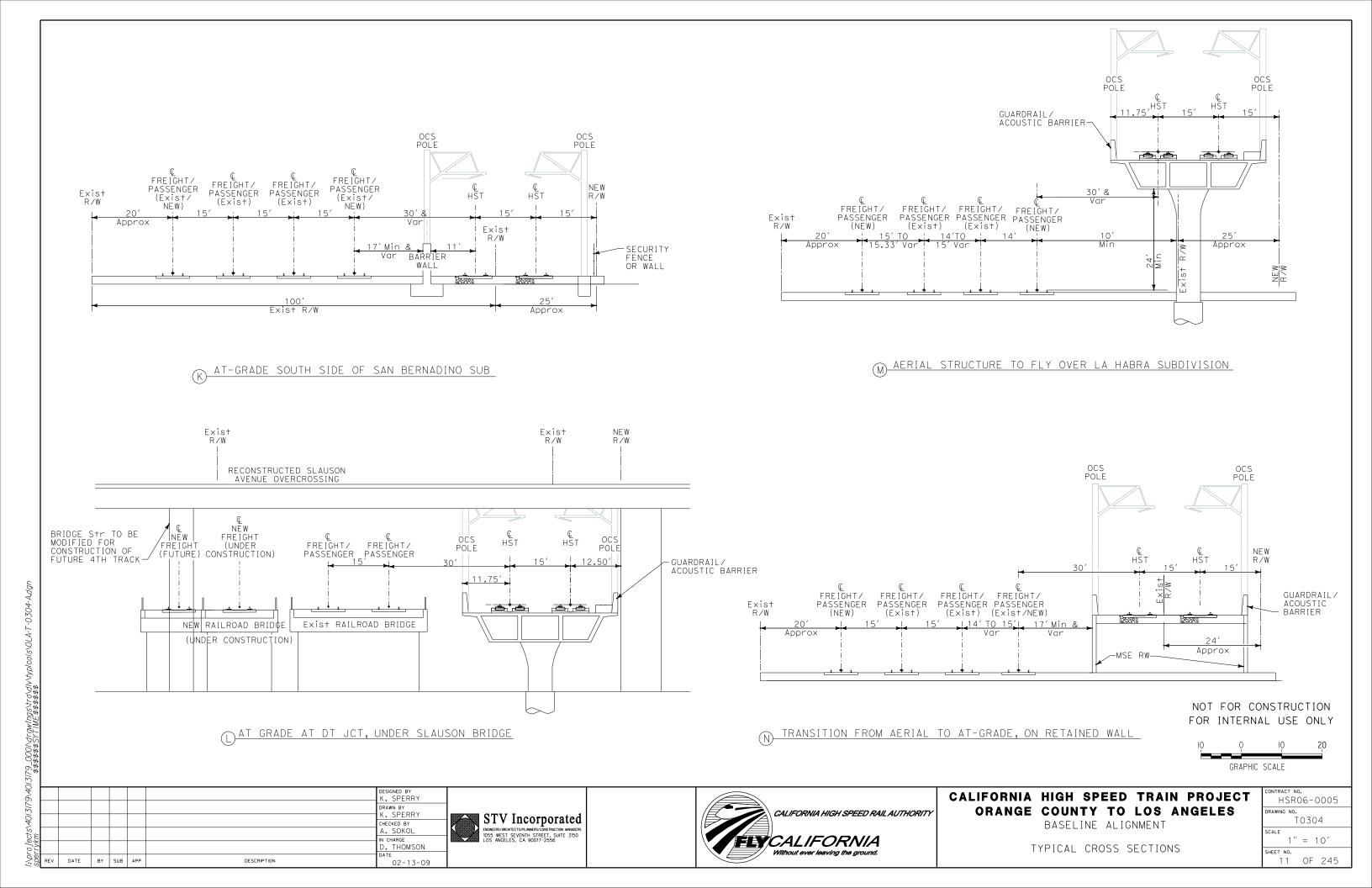
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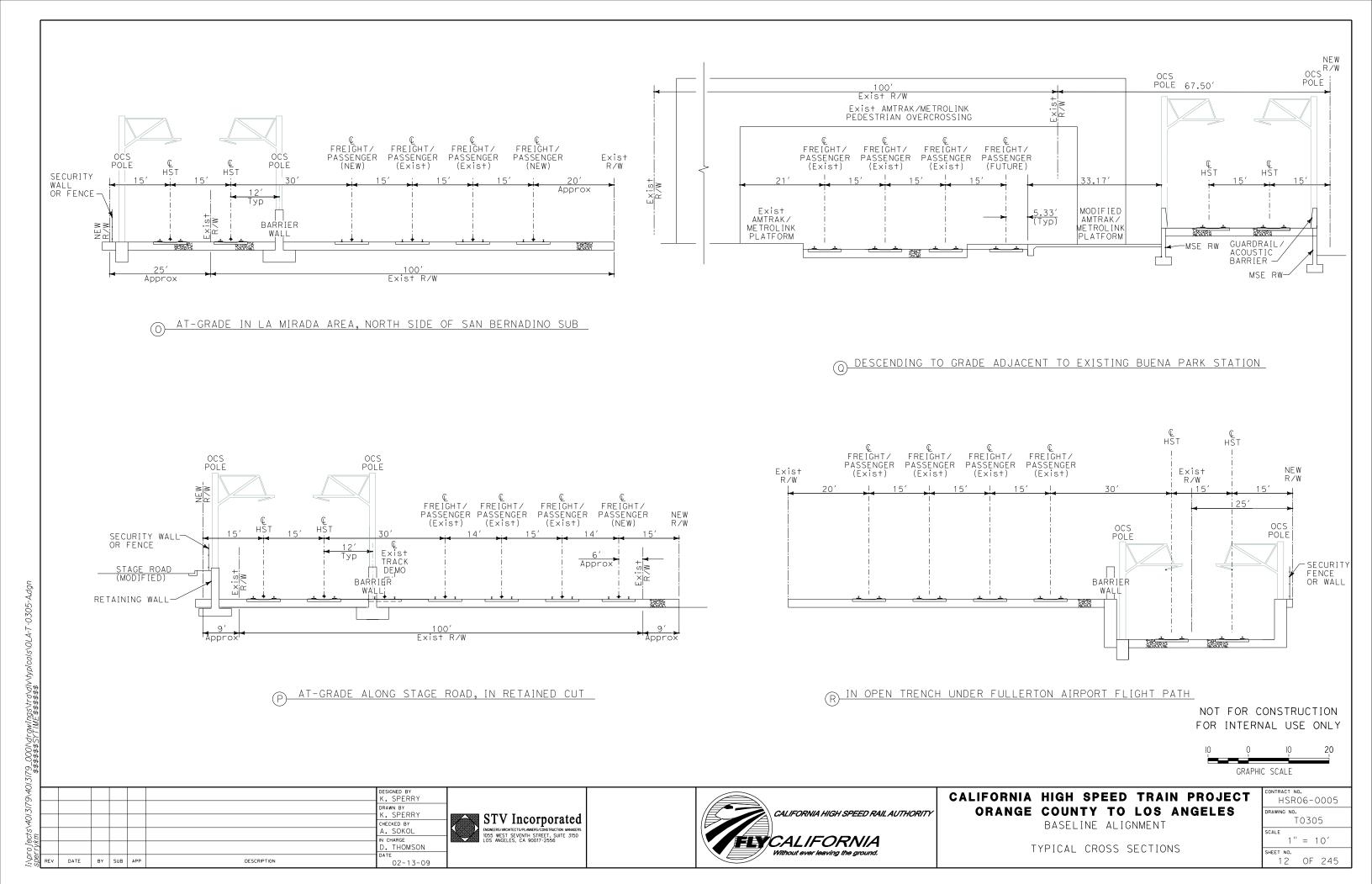
BASELINE ALIGNMENT

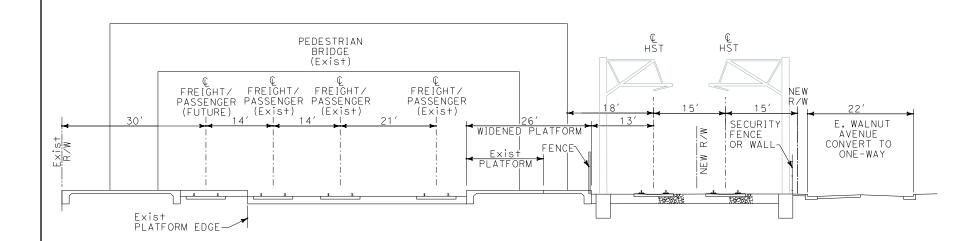
TYPICAL CROSS SECTIONS

CONTRACT NO.
HSR06-0005
DRAWING NO.
T0302
SCALE
1" = 10'
SHEET NO.
9 OF 245





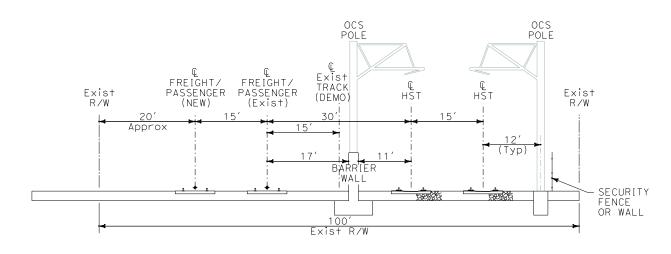




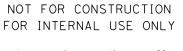
AT-GRADE ADJACENT TO EXISTING FULLERTON STATION

OCS POLE FREIGHT/ FREIGHT/ Exis+PASSENGER PASSENGER R/W (NEW) (Exis+) NEW R/W 12' (Typ) BARRIER | WALL - SECURITY FENCE OR WALL 50' Exist R/W

U AT-GRADE ON WEST SIDE OF ORANGE SUBDIVISION, 50'R/W



AT-GRADE ON WEST SIDE OF ORANGE SUBDIVISION, 100' R/W





sper	REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09
7							IN CHARGE D. THOMSON
km							CHECKED BY A. SOKOL
							DRAWN BY K. SPERRY
							K. SPERRY



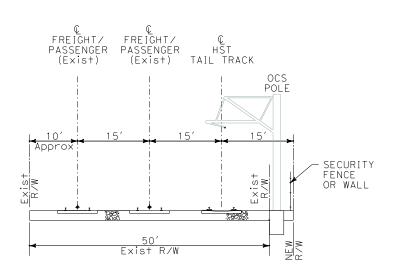


CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

BASELINE ALIGNMENT

TYPICAL CROSS SECTIONS

HSR06-0005
DRAWING NO.
T0306
SCALE
1" = 10'
SHEET NO.
13 OF 245



(W) SOUTH END OF HST ALIGNMENT

NOTES:

- ANAHEIM STATION AMENITIES, INCLUDING PEDESTRIAN ACCESS AND CANOPIES, ARE NOT SHOWN AND ARE CURRENTLY UNDER DEVELOPMENT.
- 2. TAIL TRACK SOUTH (EAST) OF ANAHEIM STATION IS A NON-REVENUE SERVICE TRACK. FINAL LENGTH AND CONFIGURATION OF TAIL TRACK IS CURRENTLY UNDER DEVELOPMENT AND IS SUBJECT TO THE LAYOUT AND LOCATION OF THE ANAHEIM LAYOVER YARD, WHICH IS ALSO CURRENTLY UNDER DEVELOPMENT.

NOT FOR CONSTRUCTION FOR INTERNAL USE ONLY



						DESIGNED BY K. SPERRY
						DRAWN BY K. SPERRY
						CHECKED BY
						A. SOKOL IN CHARGE
						D. THOMSON
REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09



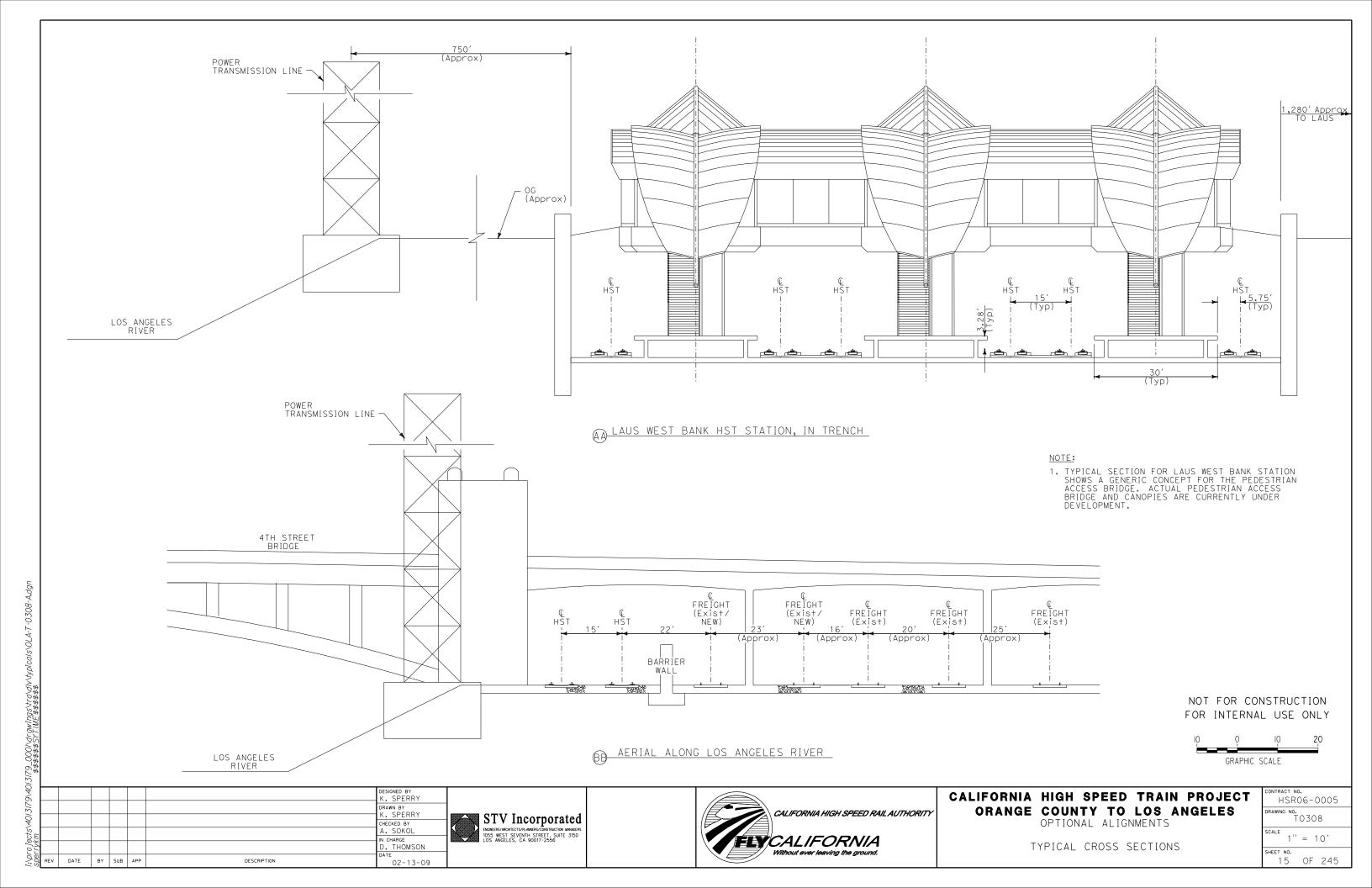


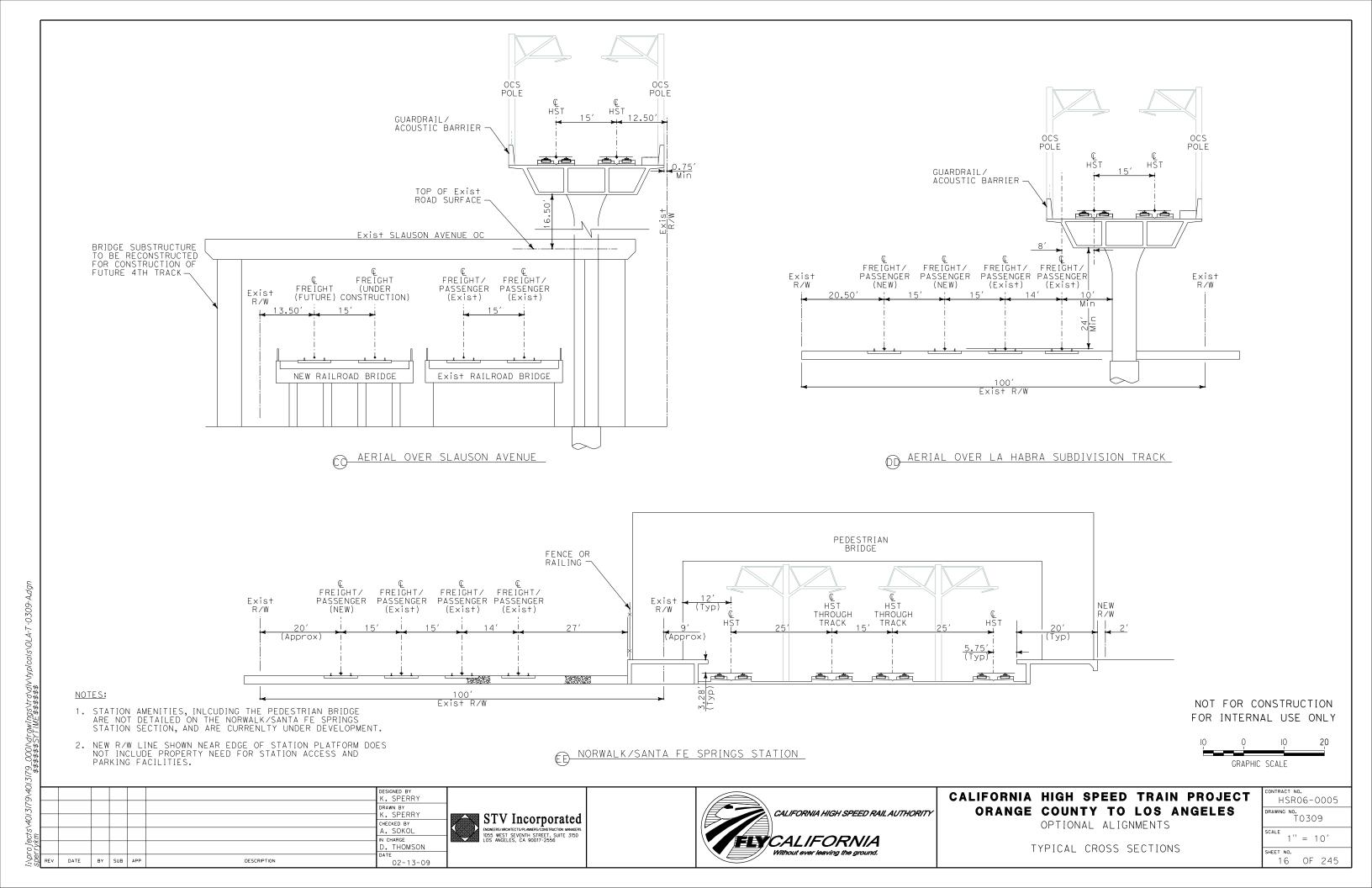
CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

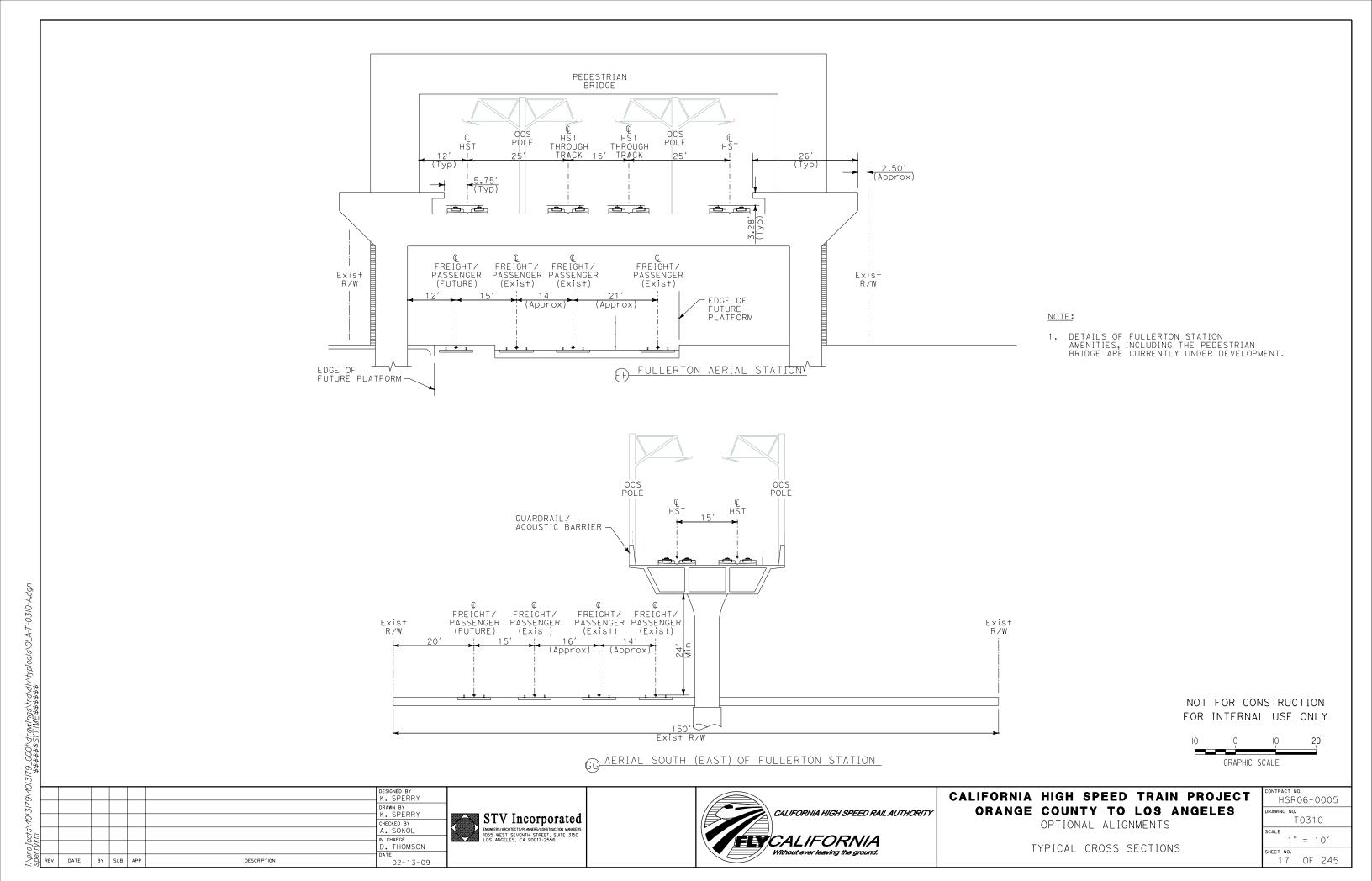
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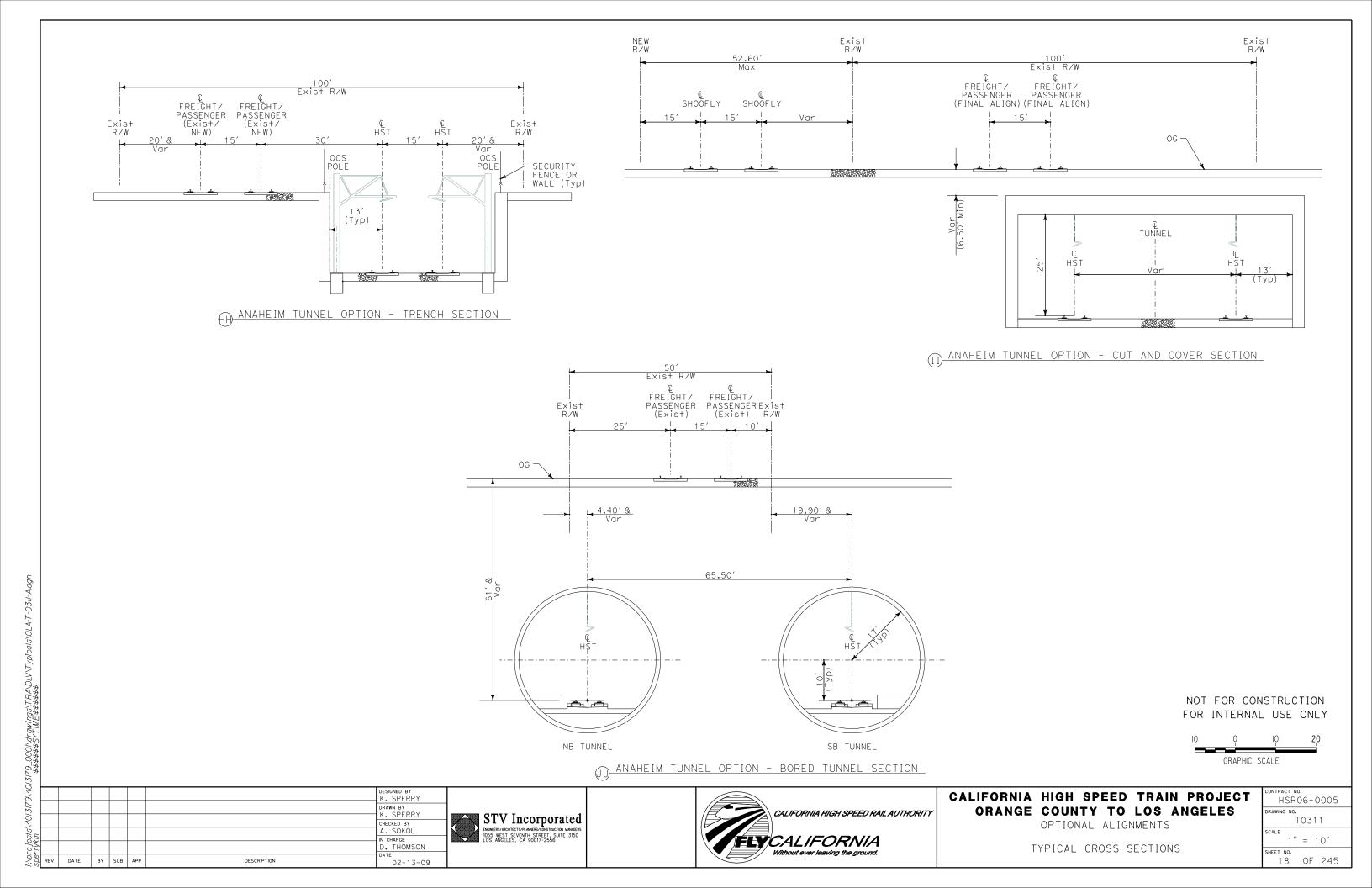
TYPICAL CROSS SECTIONS

•	CONTRACT NO. HSR06-0005
	DRAWING NO.
	T0307
	SCALE
	1" = 10'
	SHEET NO.
	14 OF 245









	5501011 05555	5.15.1.16	ACTUAL	UNBALANCED	SPIRAL		
CURVE	DESIGN SPEED (V) (MPH)	RADIUS (R) (FT)	SUPERELEVATION	SUPERELEVATION	LENGTH	BEGIN STATION	END STATION
	(V) (MPH)		(Ea) (IN)	(Eu) (IN)	(Ls) (FT)		
101	35	2,150	1.00	1.28	100	13+72.73	17+84.56
102	40	1,000	2.50	3.92	190	23+65.30	34+38.83
103	60	1,605	5.00	3.99	590	37+13.28	53+72.71
104	90	3,600	5.05	3.97	600	122+23.34	159+73.70
105	110	25,000	1.00	0.94	0	173+11.18	178+58.40
106	110	8,200	3.25	2.67	620	211+63.61	228+33.93
107	120	30,000	1.00	0.92	0	339+97.64	342+97.84
108	120	30,000	1.00	0.92	0	354+77.50	357+64.76
109	120	30,000	1.00	0.92	0	389+67.59	395+44.44
110	120	30,000	1.00	0.92	0	401+37.77	407+14.63
111	120	30,000	1.00	0.92	0	412+94.03	417+44.38
112	120	30,000	1.00	0.92	0	419+85.83	423+36.72
113	120	30,000	1.00	0.92	0	432+79.73	434+83.43
114	120	30,000	1.00	0.92	0	437+28.64	439+32.34
115	120	30,000	1.00	0.92	0	489+34.88	495+81.24
116	100	9,200	2.50	1.86	450	500+98.26	531+94.18
117	100	12,000	1.75	1.59	250	534+02.82	541+29.80
118	100	10,000	2.25	1.76	300	541+57.96	549+73.38
119	100	22,000	1.00	0.82	0	556+47.31	559+06.79
120	80	3,610	4.00	3.11	590	568+26.07	586+46.32
121	80	3,610	4.00	3.11	590	626+52.59	650+35.03
122	80	3,610	4.00	3.11	590	691+16.72	722+91.26
123	90	4,460	4.00	3.28	620	798+43.47	847+96.98
124	120	30,000	1.00	0.92	0	875+68.74	880+84.56
125	120	30,000	1.00	0.92	0	884+85.85	890+08.27
126	90	10,500	1.75	1.34	260	1050+06.04	1059+27.7
127	90	4,643.69	4.00	3.00	658.08 IN 749.01 OUT	1062+08.00	1090+20.2
128	110	25,000	1.00	0.94	0	1093+94.13	1098+93.35
129	110	25,000	1.00	0.94	0	1104+16.44	1111+72.71
130	110	25,000	1.00	0.94	0	1184+88.79	1188+90.59
131	110	25,000	1.00	0.94	0	1194+22.12	1198+23.93
132	100	6,000	3.75	2.93	700	1207+36.88	1228+20.52
133	110	25,000	1.00	0.94	0	1270+13.00	1275+40.76
134	110	25,000	1.00	0.94	0	1279+54.68	1284+75.40
135	60	1,805	4.50	3.50	440	1303+48.36	1336+22.99
136	100	5,700	4.00	3.04	520	1369+72.08	1389+37.57
137	100	22,000	1.00	0.82	0	1417+22.61	1421+48.12
138	100	22,000	1.00	0.82	0	1424+98.19	1429+23.70
139	100	22,000	1.00	0.82	0	1432+18.90	1435+93.43
140	100	22,000	1.00	0.82	0	1441+00.04	1444+74.57
141	100	5,750	4.00	2.97	700	1508+62.47	1570+23.82
142	50	8,000	0.50	0.75	0	1585+03.80	1587+02.89
143	40	5,000	0.50	0.78	0	1602+24.05	1605+56.29

			A O T		CDIDA		
CLIDVE	DESIGN SPEED	RADIUS	ACTUAL	UNBALANCED	SPIRAL	DECIN CTATION	END CIATIO
CURVE	(V) (MPH)	(R) (FT)	SUPERELEVATION (Ea) (IN)	SUPERELEVATION (Eu) (IN)	LENGTH (Ls) (FT)	BEGIN STATION	END STATIO
0.04	3.5	0.450				4.4.75.00	47.74.04
201	35	2,150	1.00	1.28	100	14+75.92	17+31.84
202	40	1,000	2.50	3.92	190	22+90.62	34+36.67
203	60	1,605	5.00	3.99	590	36+83.24	53+42.68
204	90	3,585	5.10	3.96	598.75	121+99.12	159+35.10
205A	80	5,400	2.50	2.25	300	174+63.56	183+44.19
205B	80	5,400	2.50	2.25	300	185+27.13	202+71.60
206	100	6,600	3.25	2.83	600	205+03.41	228+13.02
207	120	30,000	1.00	0.92	0	339+76.22	342+76.42
208	120	30,000	1.00	0.92	0	354+56.08	357+43.34
209	120	30,000	1.00	0.92	0	389+46.38	395+23.24
210	120	30,000	1.00	0.92	0	401+16.57	406+93.43
211	120	30,000	1.00	0.92	0	412+72.80	417+23.14
212	120	30,000	1.00	0.92	0	419+64.59	423+15.48
213	120	30,000	1.00	0.92	0	432+58.30	434+62.00
214	120	30,000	1.00	0.92	0	437+07.20	439+10.91
215	120	30,000	1.00	0.92	0	489+13.68	495+60.04
216	100	9,200	2.50	1.86	450	500+79.40	531+75.31
217	100	12,000	1.75	1.59	250	533+86.43	541+13.40
218	100	10,000	2.25	1.75	300	541+41.47	549+56.90
219	100	22,000	1.00	0.82	0	556+30.53	558+90.01
220	80	3,595	4.00	3.14	588.77	568+09.99	586+23.90
221	80	3,625	4.00	3.08	591.22	626+30.17	650+21.28
222	80	3,625	4.00	3.08	591.22	691+01.75	722+88.25
223	90	4,445	4.00	3.31	618.96	798+40.37	847+78.26
224	120	30,000	1.00	0.92	0	875+50.68	880+66.49
225	120	30,000	1.00	0.92	0	884+67.78	889+90.20
226	90	10,515	1.75	1.34	260.19	1049+87.75	1059+10.5
227	90	4,628.69	4.00	3.02	657.01 IN 747.80 OUT	1061+91.28	1089+95.5
228	110	25,000	1.00	0.94	0	1093+69.32	1098+69.1
229	110	25,000	1.00	0.94	0	1103+92.30	1111+48.5
230	110	25,000	1.00	0.94	0	1184+65.00	1188+66.8
231	110	25,000	1.00	0.94	0	1193+98.34	1198+00.1
232	100	6,000	3.75	2.93	700	1207+11.23	1227+94.8
233	110	25,000	1.00	0.94	0	1269+85.77	1275+13.5
234	110	25,000	1.00	0.94	0	1279+27.46	1284+48.1
235	60	1,820	4.50	3.43	441.82	1303+20.07	1336+20.0
236	100	5,700	4.00	3.04	520	1369+66.34	1389+31.8
237	100	22,000	1.00	0.82	0	1417+15.10	1421+40.6
238				0.82	0		1429+16.1
239	100	22,000	1.00		0	1424+90.69	
	100	22,000	1.00	0.82	=	1432+11.12	1435+85.6
240	100	22,000	1.00	0.82	0	1440+92.27	1444+66.8
241	100	5,750	4.00	2.97	700	1508+47.11	1570+08.4
242A	50	8,000	0.50	0.75	0	1577+18.29	1580+18.2
242B	50	8,000	0.50	0.75	0	1583+87.92	1584+88.7
243A	40	5,000	0.50	0.78	0	1602+46.57	1603+41.4
243B	40	5,000	0.50	0.78	0	1605+85.43	1606+50.0

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5							K. SPERRY
5							DRAWN BY S. MAGALLON
2							CHECKED BY A. SOKOL
rykm							IN CHARGE D. THOMSON
sper	REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

BASELINE ALIGNMENT

TRACK GEOMETRY DATA

CONTRACT NO.
HSR06-0005
DRAWING NO.
T0400
SCALE
NO SCALE

SHEET NO. 19 OF 245

CURVE	DESIGN SPEED (V) (MPH)	RADIUS (R) (FT)	ACTUAL SUPERELEVATION (Eq) (IN)	UNBALANCED SUPERELEVATION (Eu) (IN)	SPIRAL LENGTH (Ls) (FT)	BEGIN STATION	END STATION
301	35	5,000	0.45	0.53	140	18+65.95	23+68.54
302	50	2,000	2.25	2.76	320	36+04.56	45+04.03
303	100	22,000	1.00	0.82	0	553+59.73	561+45.09
304	90	4,450	4.00	3.30	650	564+08.66	586+81.55
305	80	3,610	4.00	3.11	590	626+09.64	649+92.09
306	120	30,000	1.00	0.92	0	748+69.80	754+98.12
307	100	22,000	1.00	0.82	0	772+33.62	776+94.38
308	80	3,270	4.00	3.85	703.31 IN 510.43 OUT	801+32.74	826+58.12
309	100	6,270	3.50	2.90	510.43 IN 699.69 OUT	826+58.12	851+66.33
310	100	6,000	3.75	2.93	700	1207+36.88	1228+20.52
311	120	30,000	1.00	0.92	0	1250+56.01	1257+36.99
312	100	22,000	1.00	0.82	0	1268+96.49	1273+95.65
313	65	1,900	5.00	3.92	700	1301+17.09	1338+01.46
314	100	5,700	4.00	3.04	520	1369+72.08	1389+37.57
315	100	22,000	1.00	0.82	0	1417+22.61	1421+48.12
316	100	22,000	1.00	0.82	0	1424+98.19	1429+23.70
317	100	22,000	1.00	0.82	0	1432+18.90	1435+93.43
318	100	22,000	1.00	0.82	0	1441+00.04	1444+74.57
319	100	5,750	4.00	2.97	700	1508+62.47	1570+23.82

TRACK ALIGNMENT CURVE DATA SUMMARY TABLE - NORTHBOUND TRACK (O-LA NB)

	DESIGN SPEED	RADIUS	ACTUAL	UNBALANCED	SPIRAL		
CURVE	(V) (MPH)	(R) (FT)		SUPERELEVATION	LENGTH	BEGIN STATION	END STATION
			(Ea) (IN)	(Eu) (IN)	(Ls) (FT)		
401A	35	10,000	0.25	0.24	110	19+32.15	22+26.61
401B	45	5,000	0.80	0.82	120	27+43.90	33+18.73
402	50	2,000	2.25	2.76	320	35+98.87	44+98.34
403	100	22,000	1.00	0.82	0	553+43.13	561+28.48
404	90	4,450	4.00	3.30	650	563+89.56	586+62.45
405	80	3,625	4.00	3.08	591.22	625+87.16	649+78.28
406	120	30,000	1.00	0.92	0	748+66.34	754+94.65
407	100	22,000	1.00	0.82	0	772+30.15	776+90.92
408	80	3,255	4.00	3.85	701.69 IN 508.65 OUT	801+29.93	826+44.80
409	100	6,255	3.50	2.90	508.65 IN 698.85 OUT	826+44.80	851+47.72
410	100	6,000	3.75	2.93	700	1207+35.14	1228+18.78
411	120	30,000	1.00	0.92	0	1250+52.36	1257+33.34
412	100	22,000	1.00	0.82	0	1268+92.84	1273+92.00
413	65	1,915	5.00	3.85	702.76	1301+12.23	1338+22.92
414A	100	5,700	4.00	3.04	520	1368+72.83	1390+03.46
414B	110	25,000	1.00	0.94	0	1392+32.17	1399+56.45
415	100	22,065.50	1.00	0.82	0	1417+12.24	1421+39.02
416	100	21,934.50	1.00	0.82	0	1424+89.09	1429+13.33
417	100	21,934.50	1.00	0.82	0	1432+08.53	1435+81.95
418A	100	22,065.50	1.00	0.82	0	1440+88.56	1444+64.20
418B	100	25,000	0.75	0.85	0	1477+93.83	1487+75.57
418C	100	25,000	0.75	0.85	0	1490+80.00	1500+61.75
419	100	5,750	4.00	2.97	700	1508+45.13	1570+06.48

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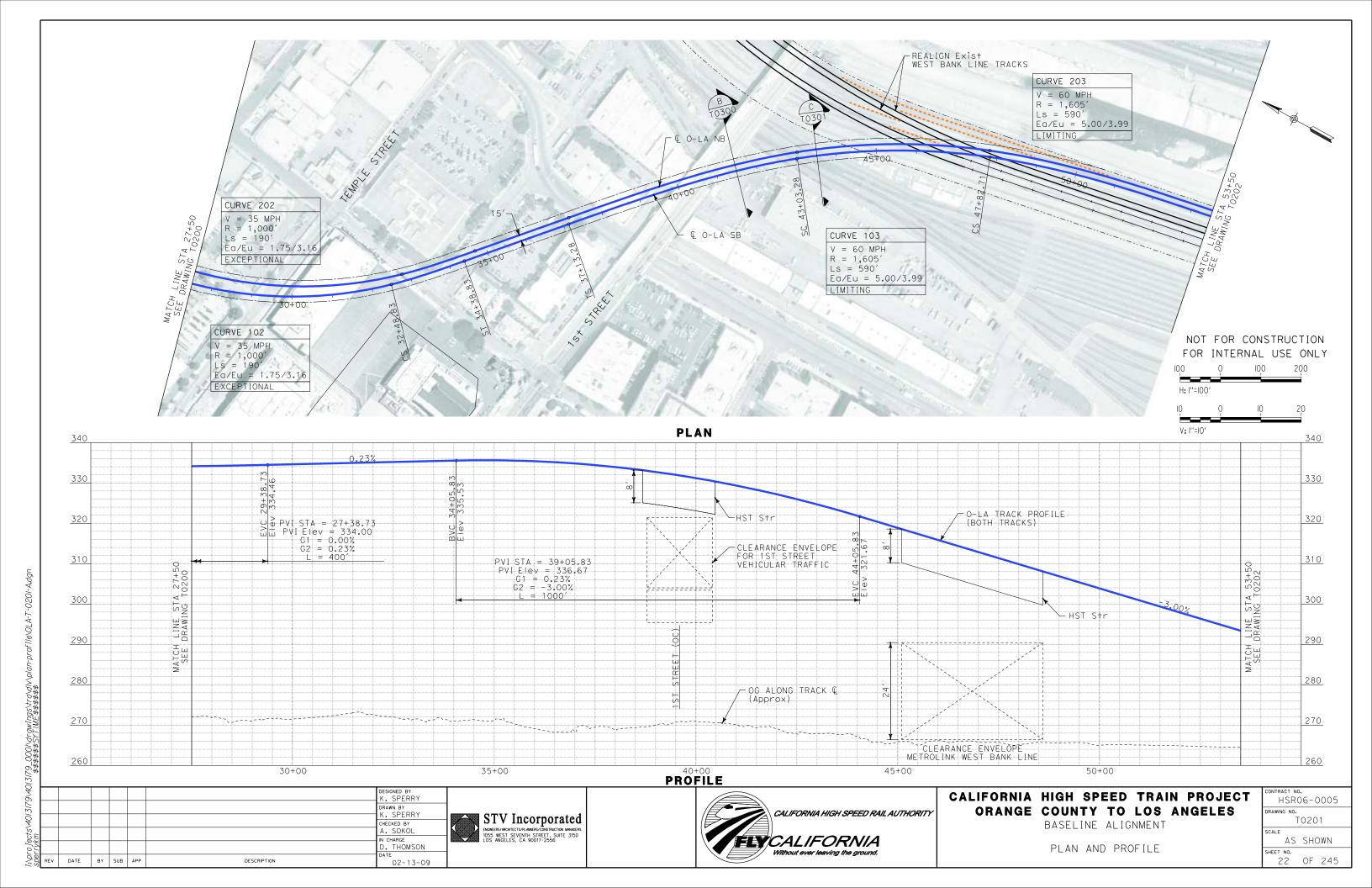
CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

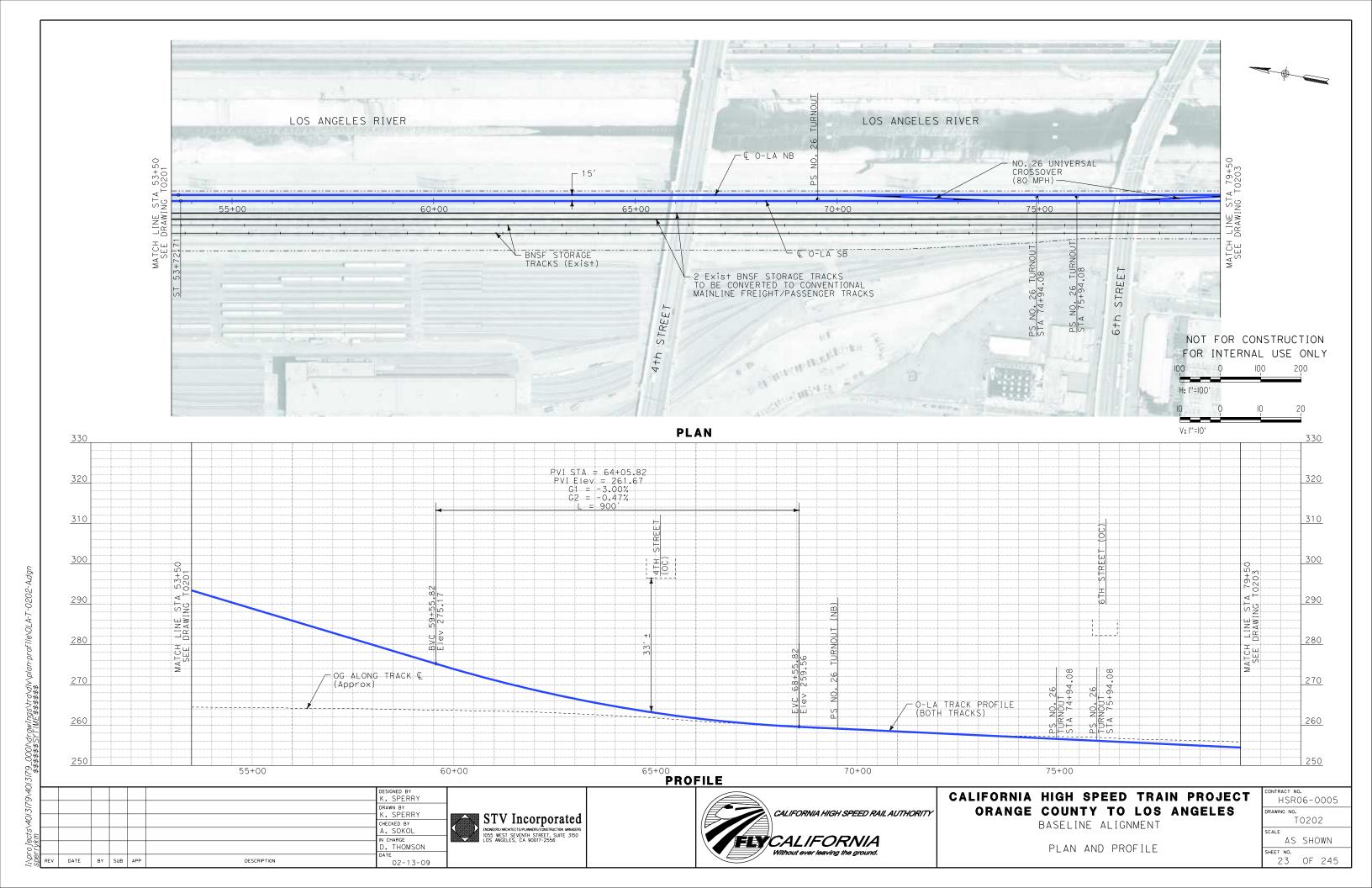
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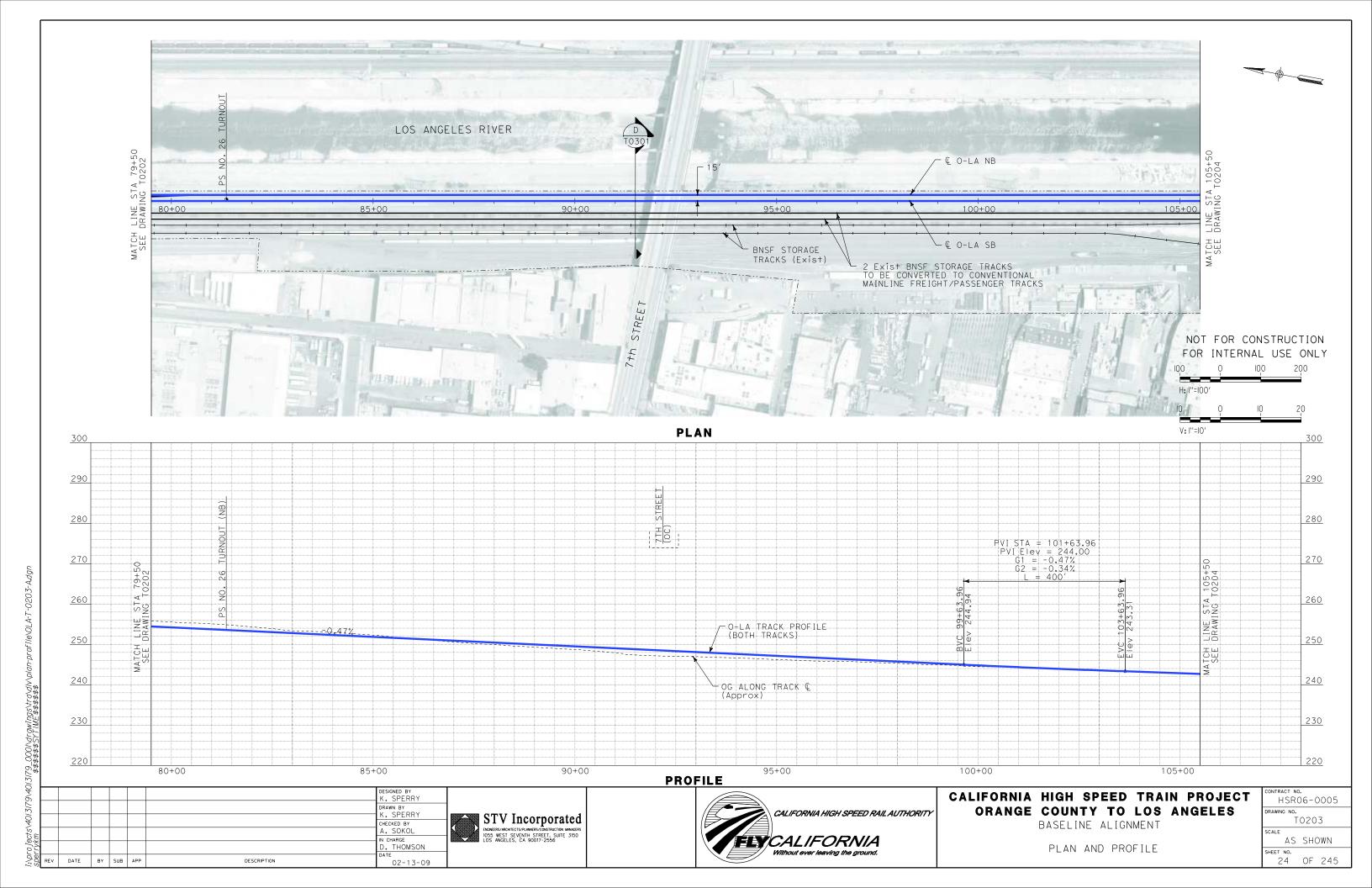
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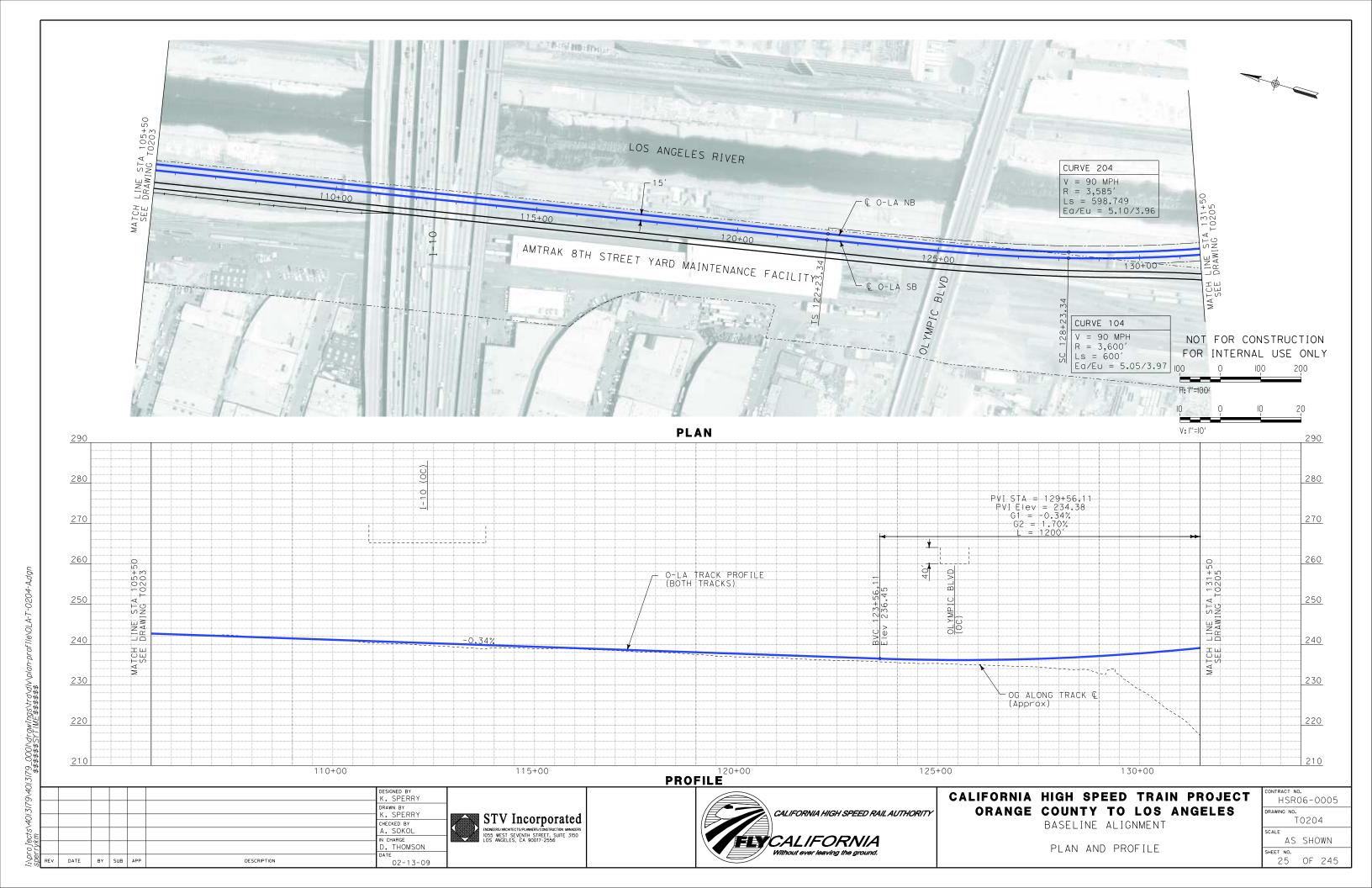
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DRAWING NO.
T0401
SCALE
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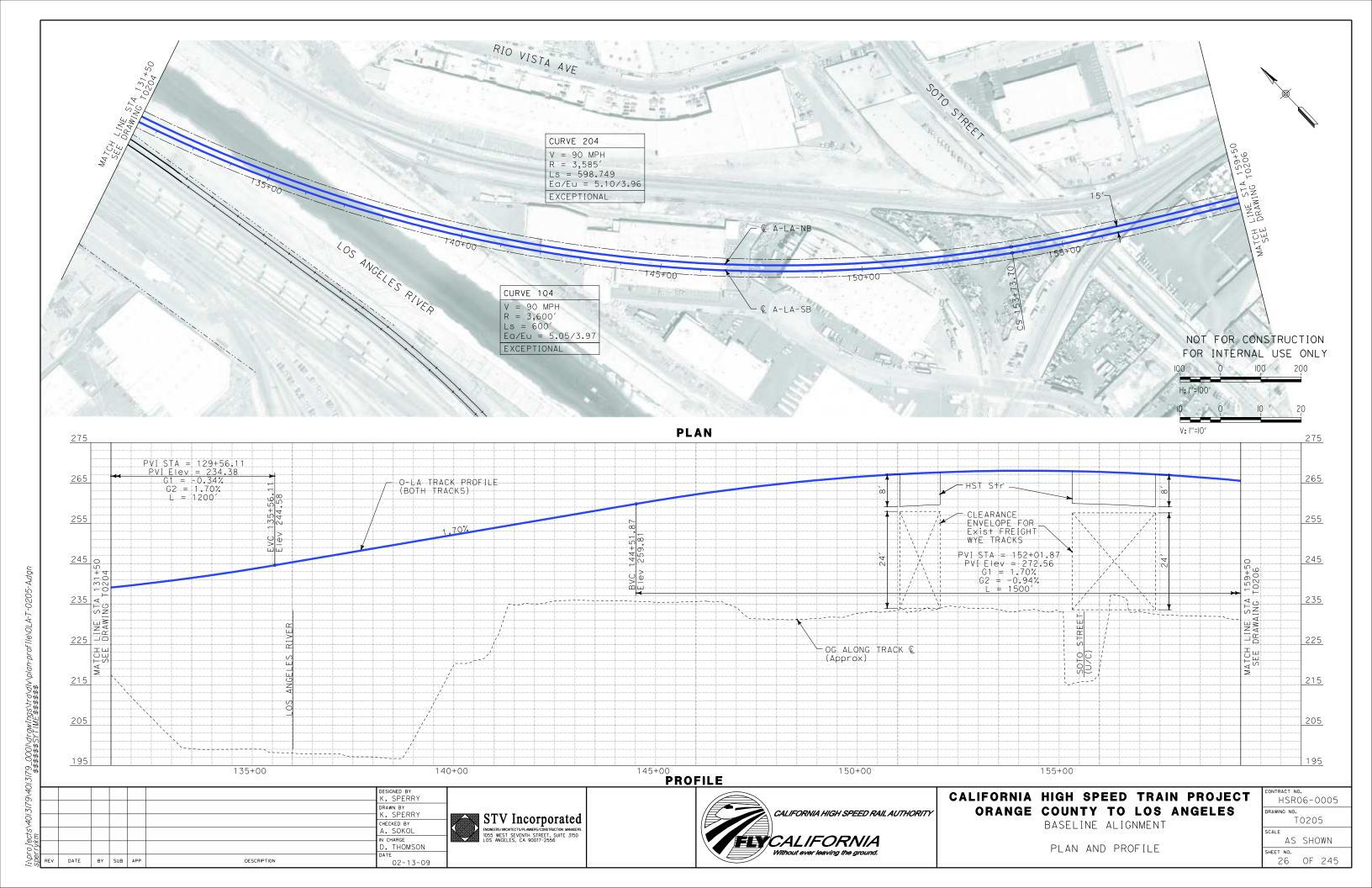
SHEET NO. 20 OF 245

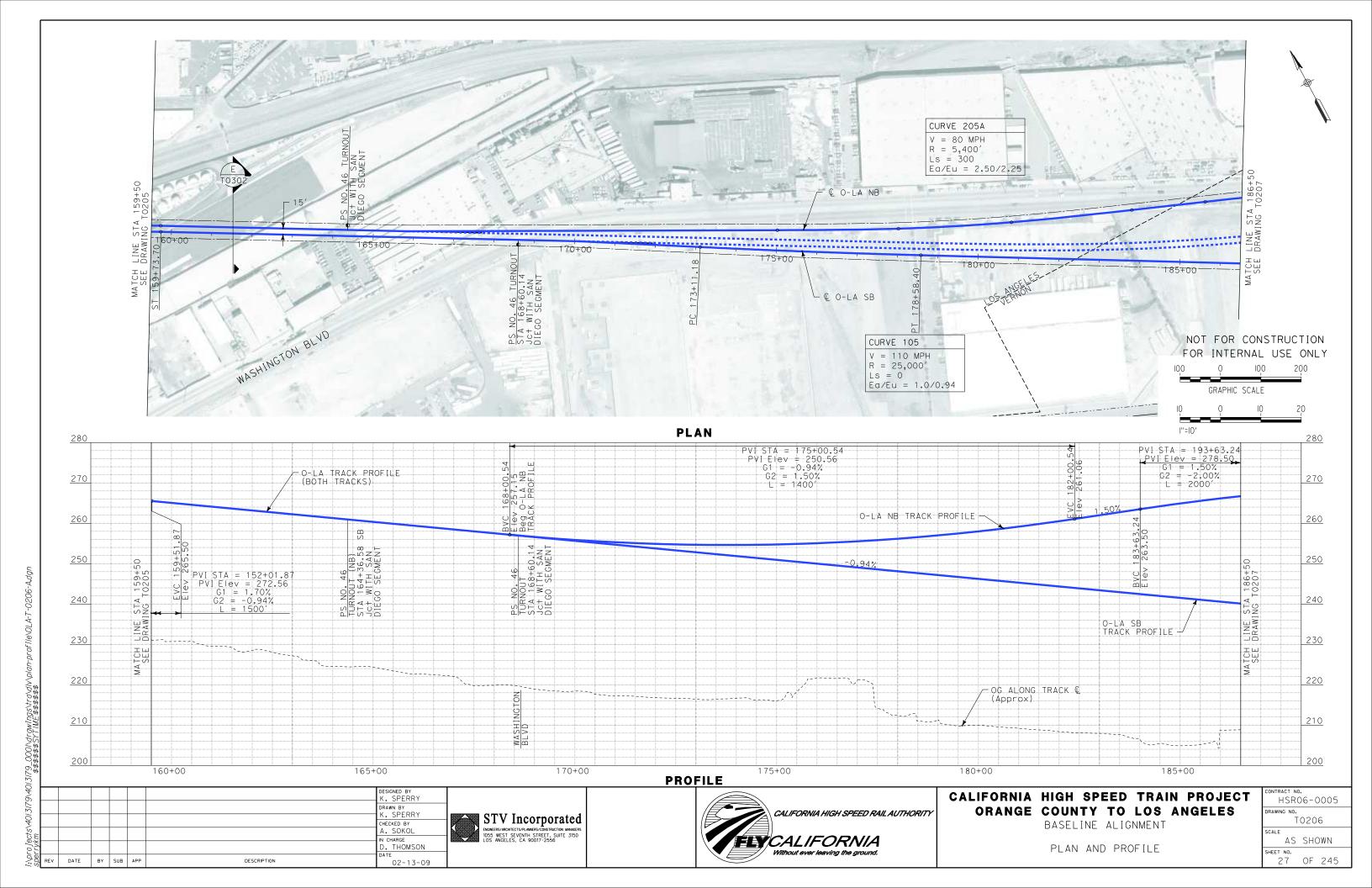


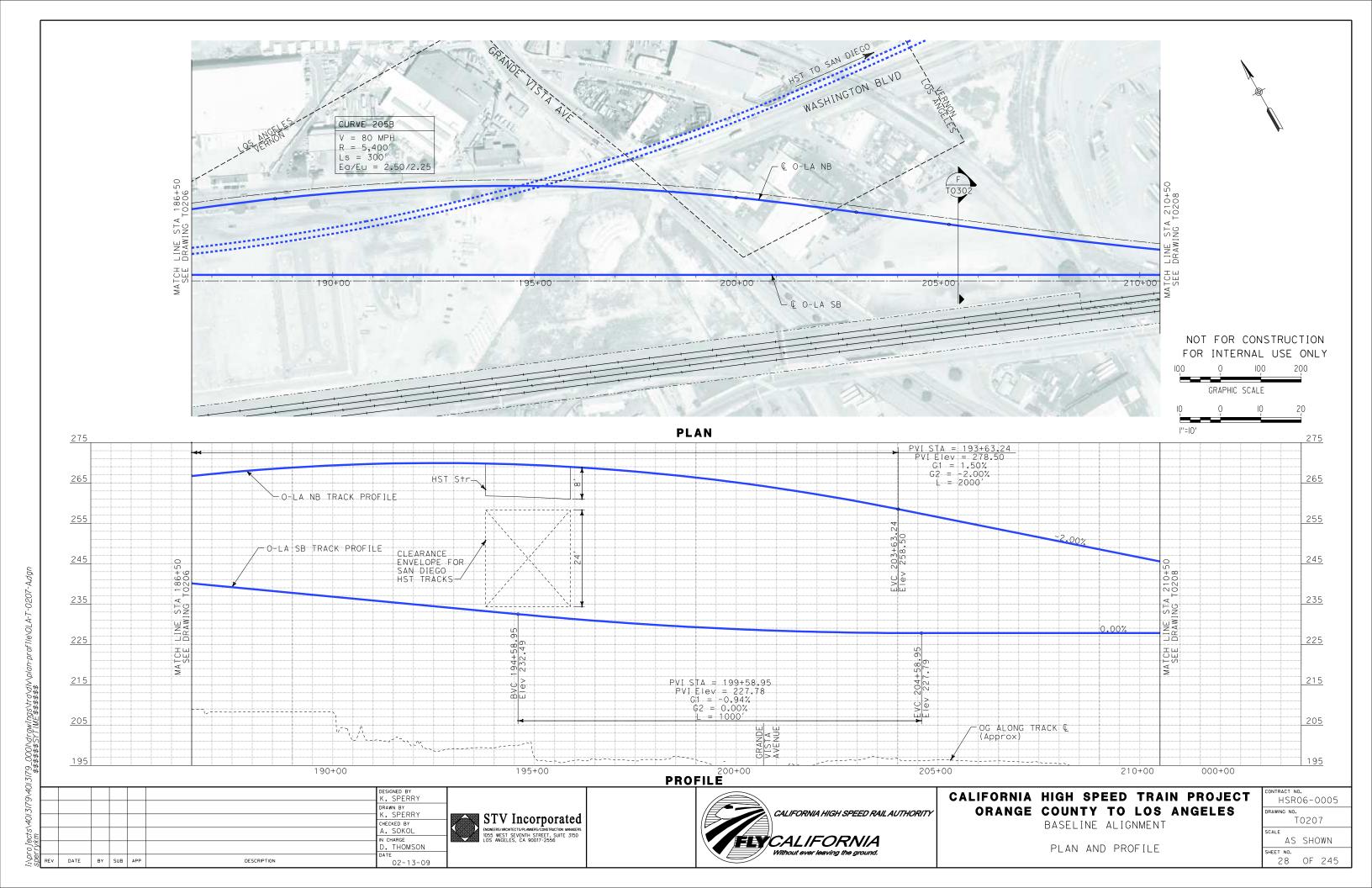


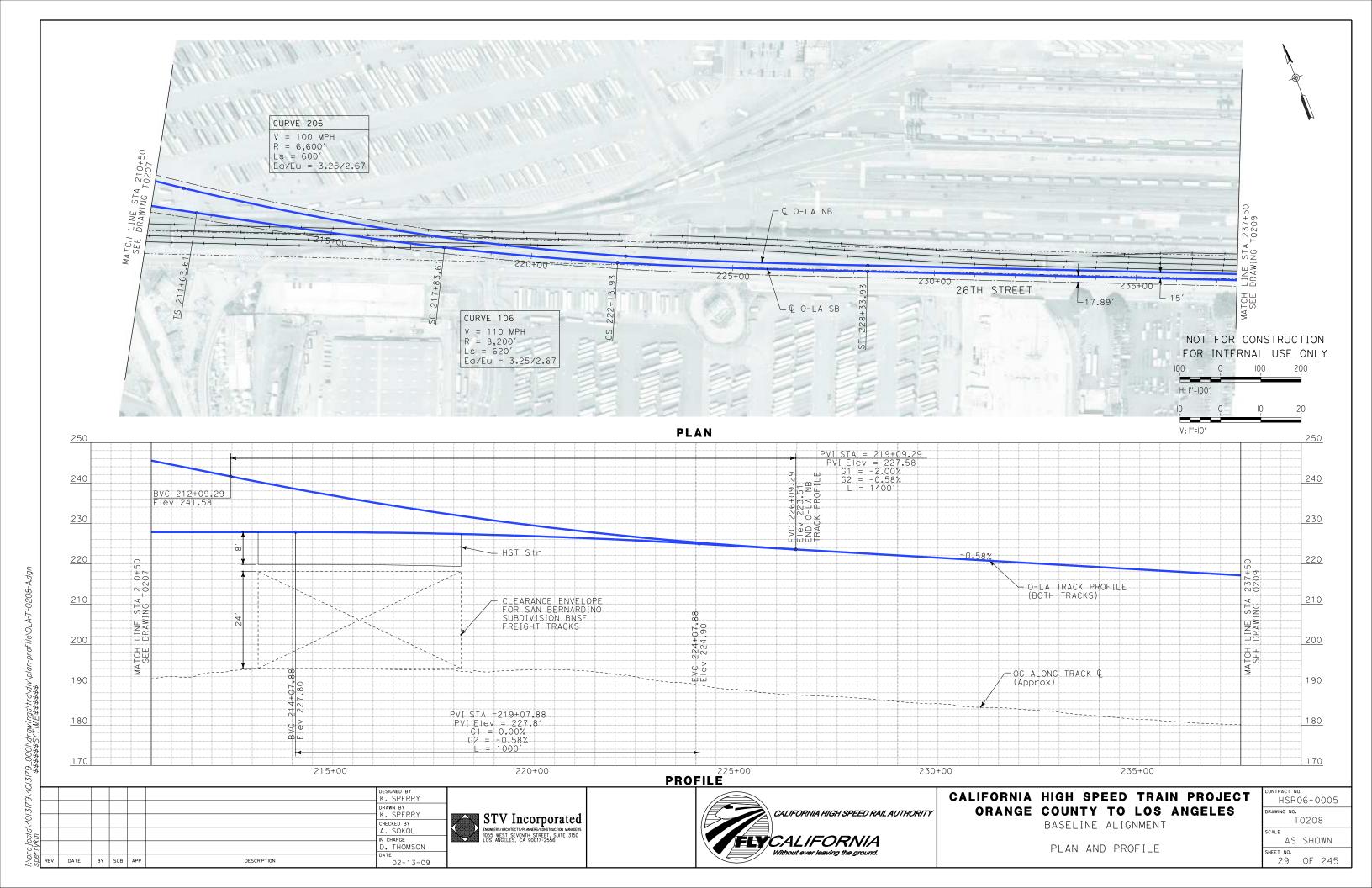


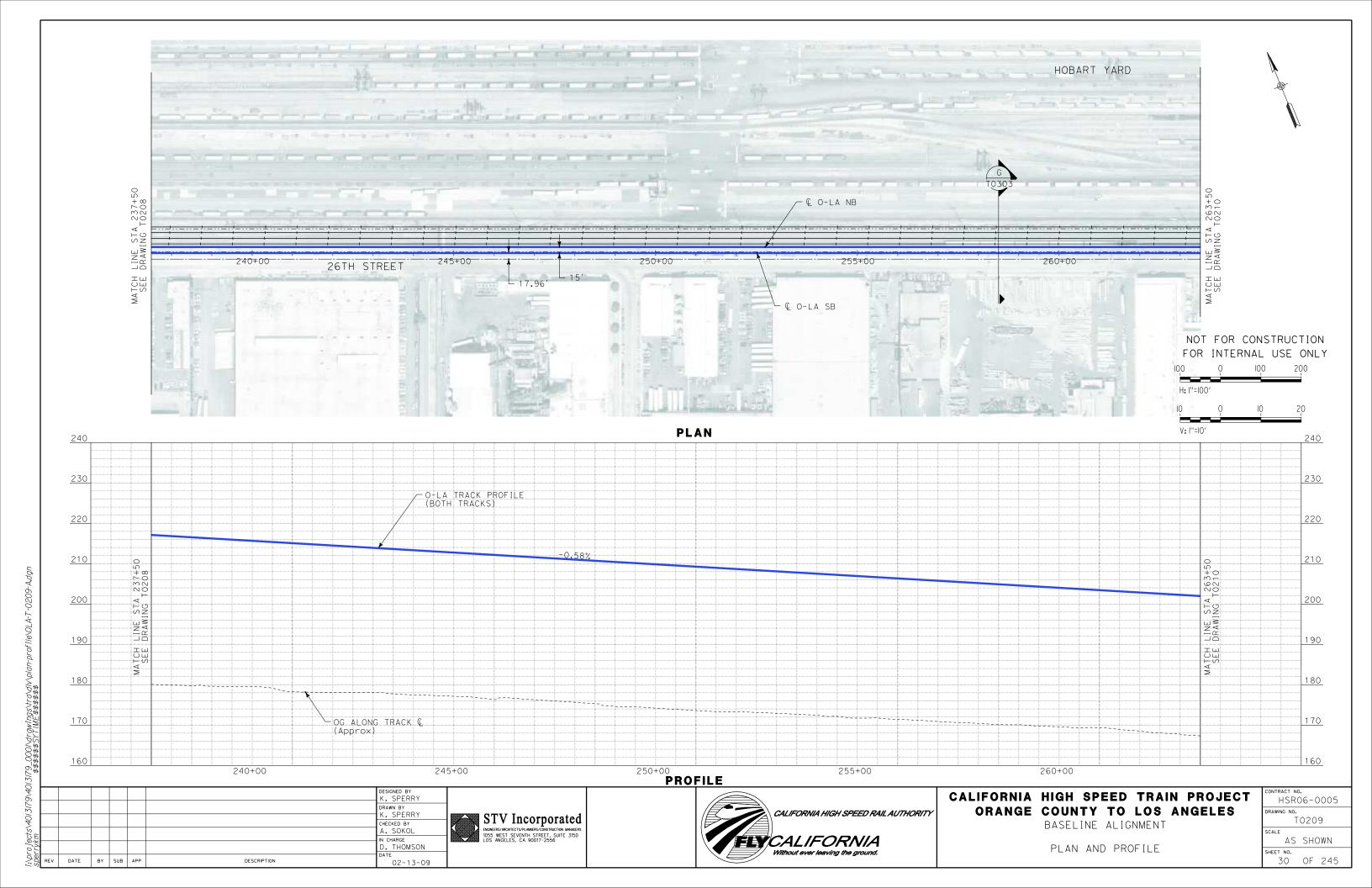


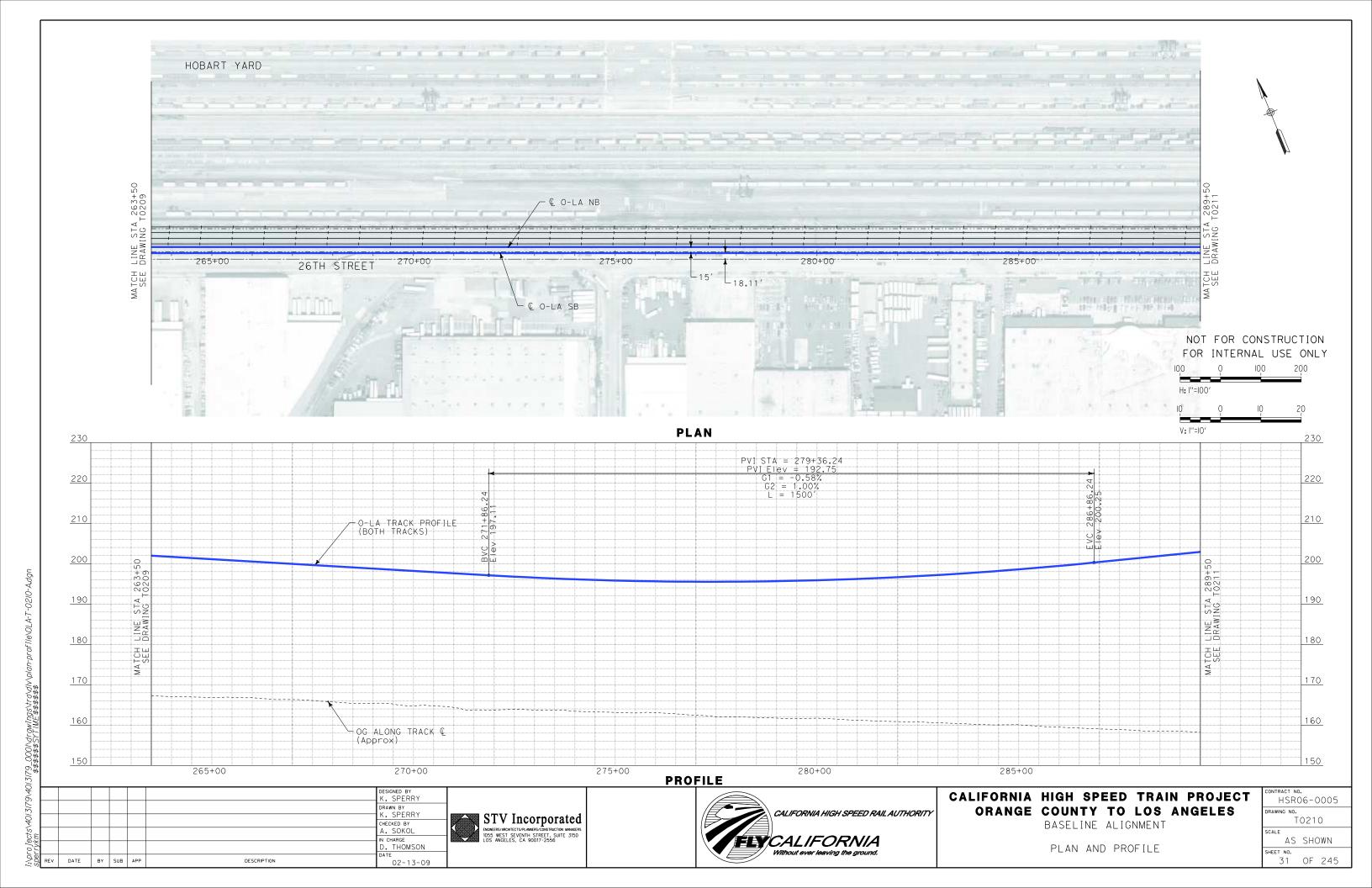


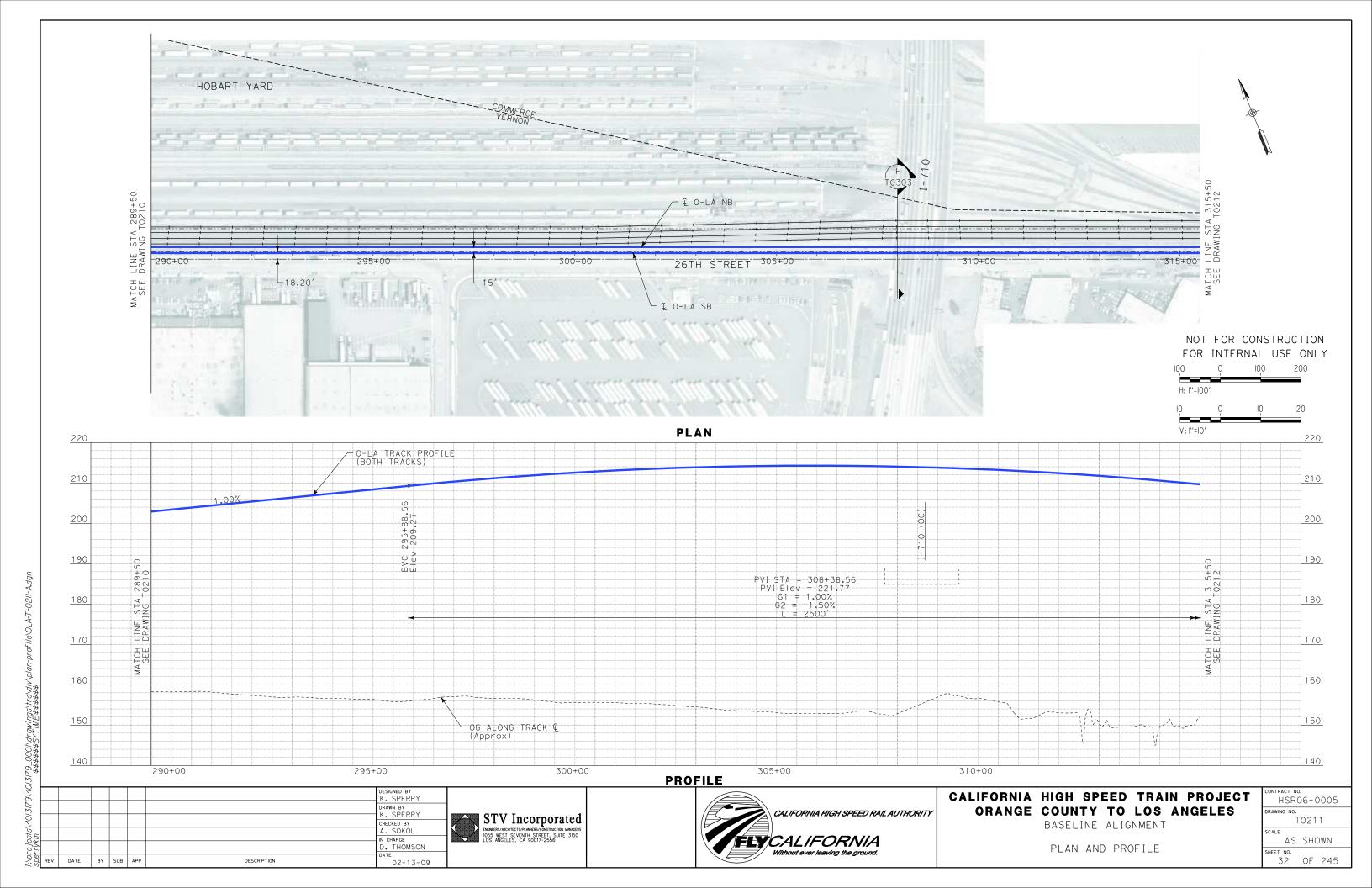


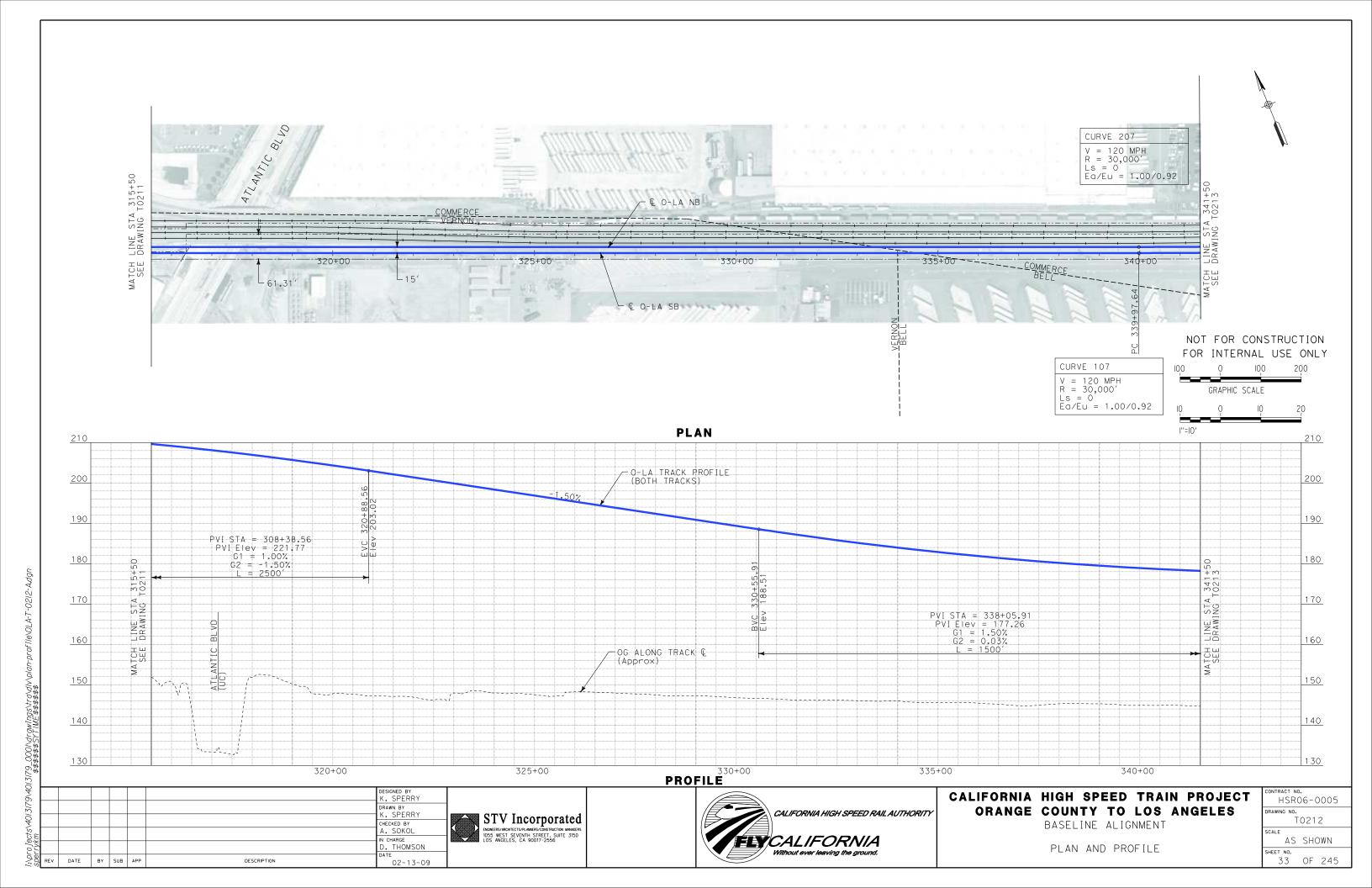


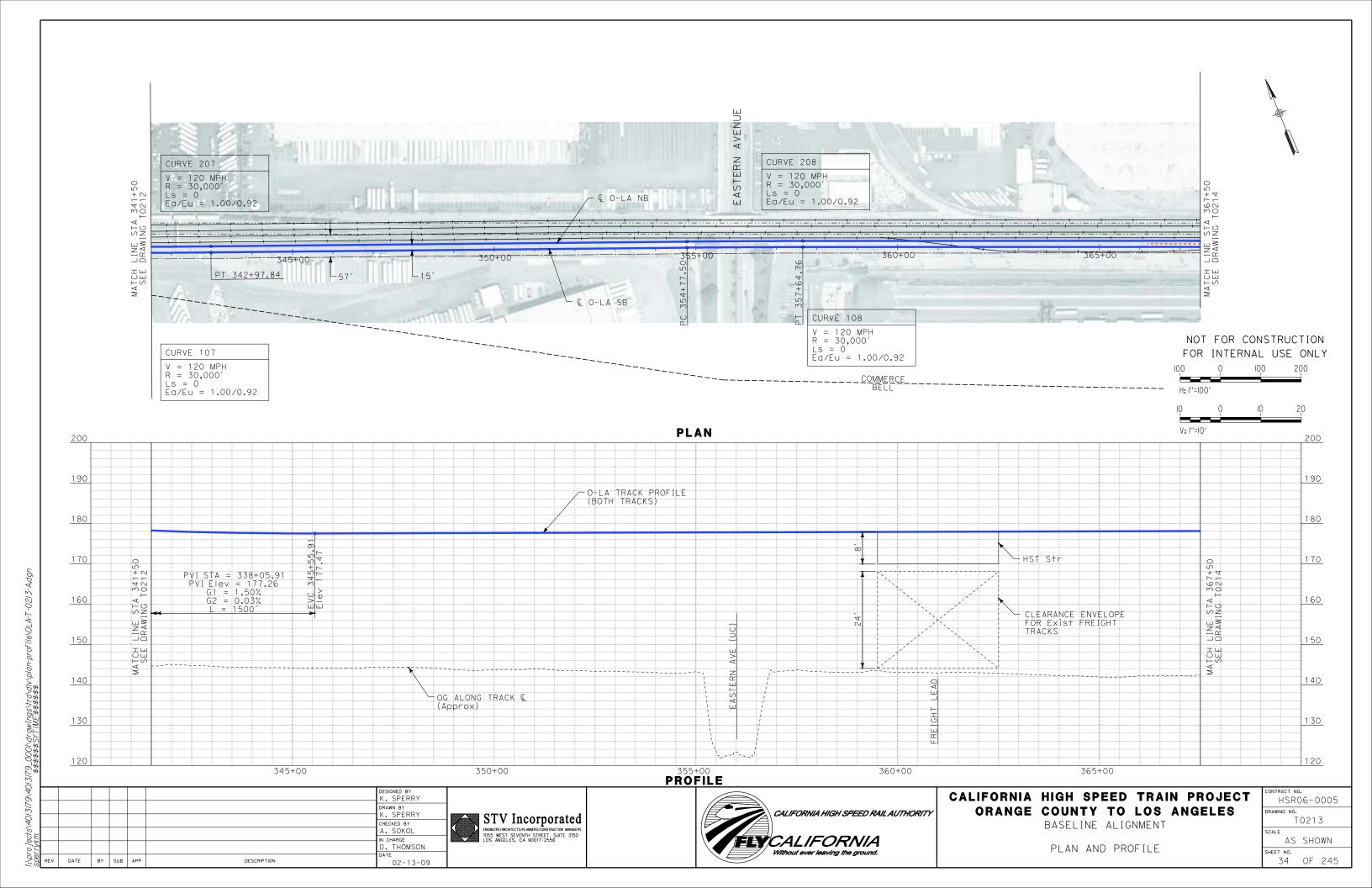


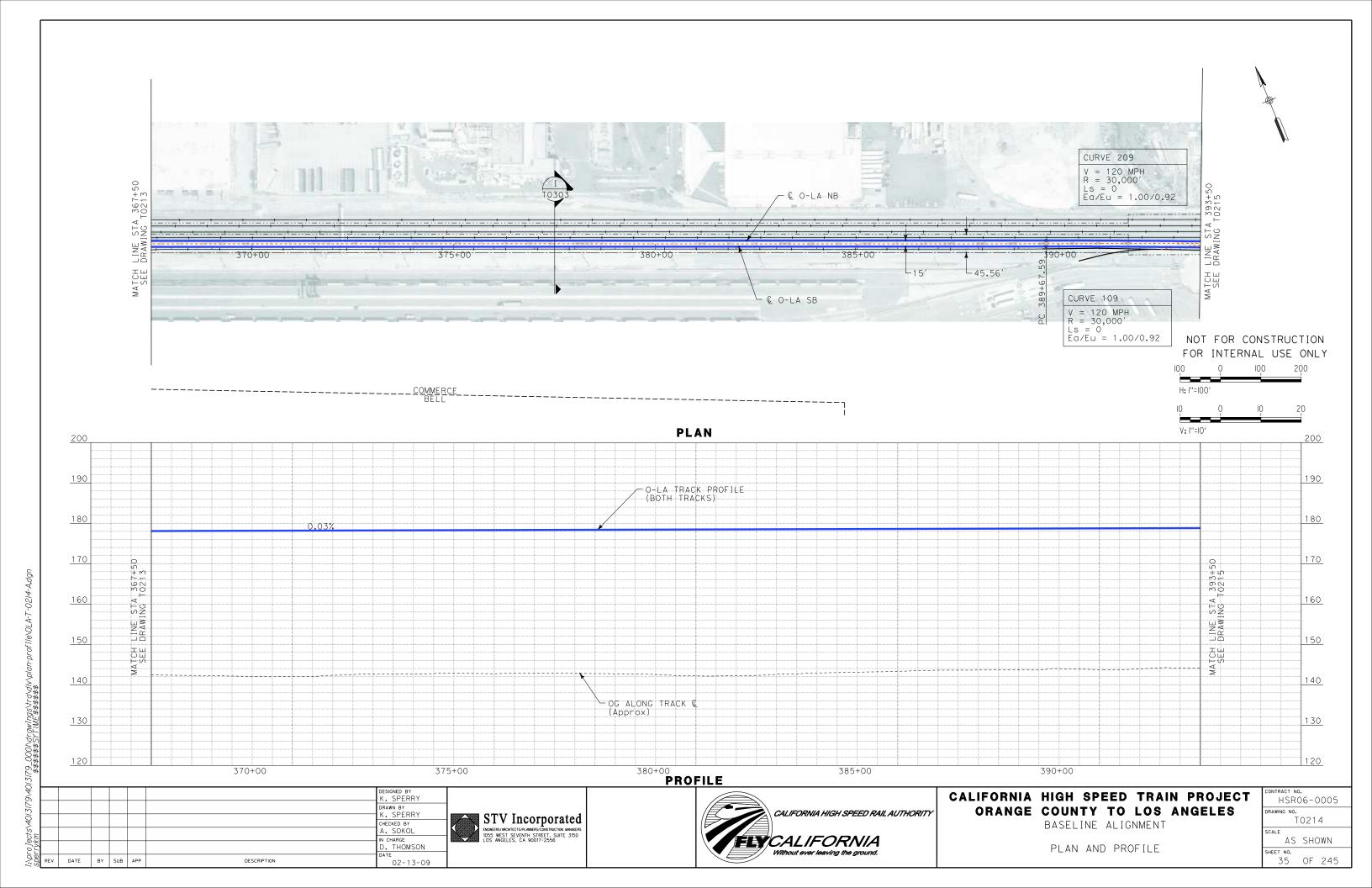


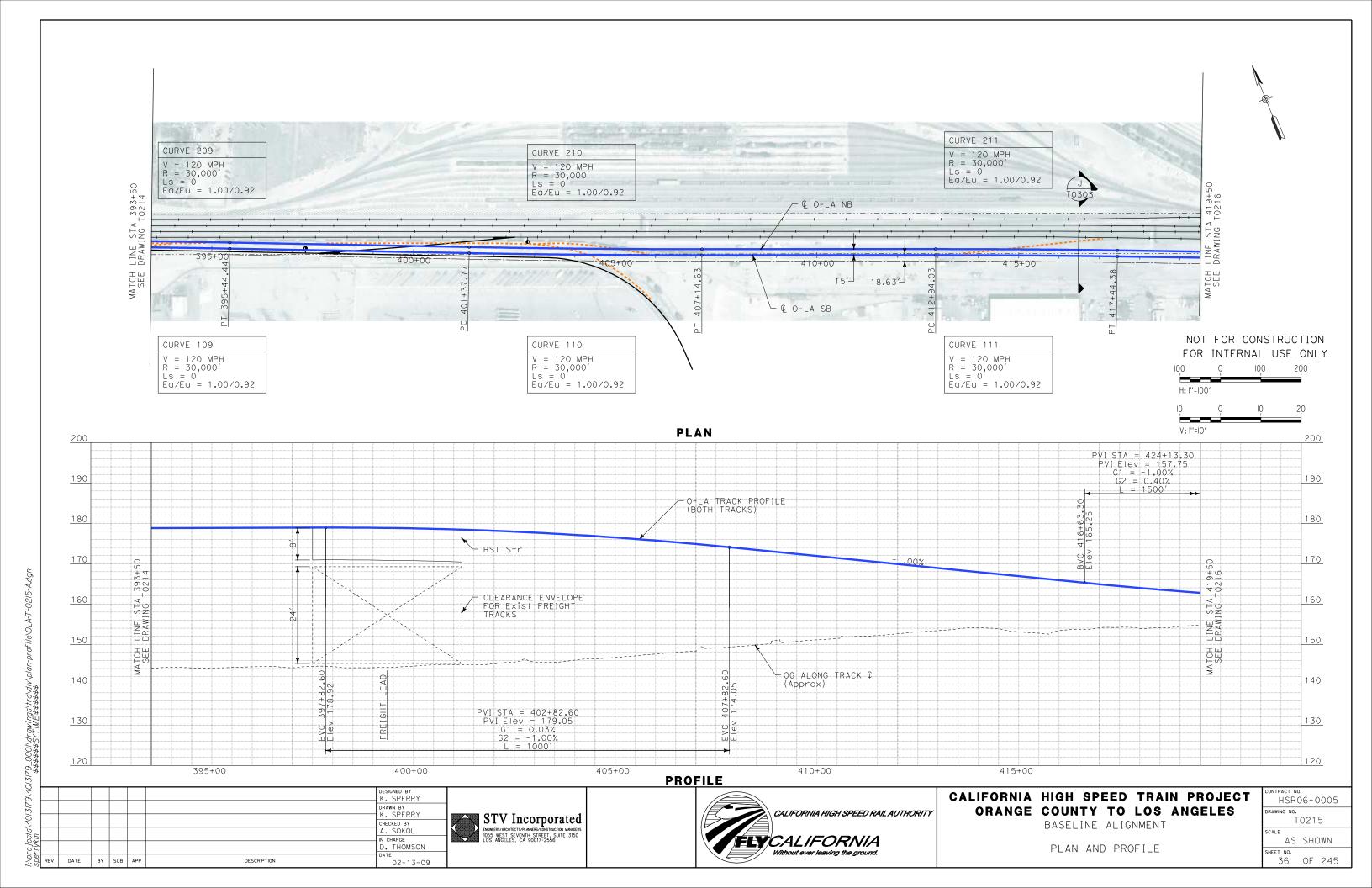


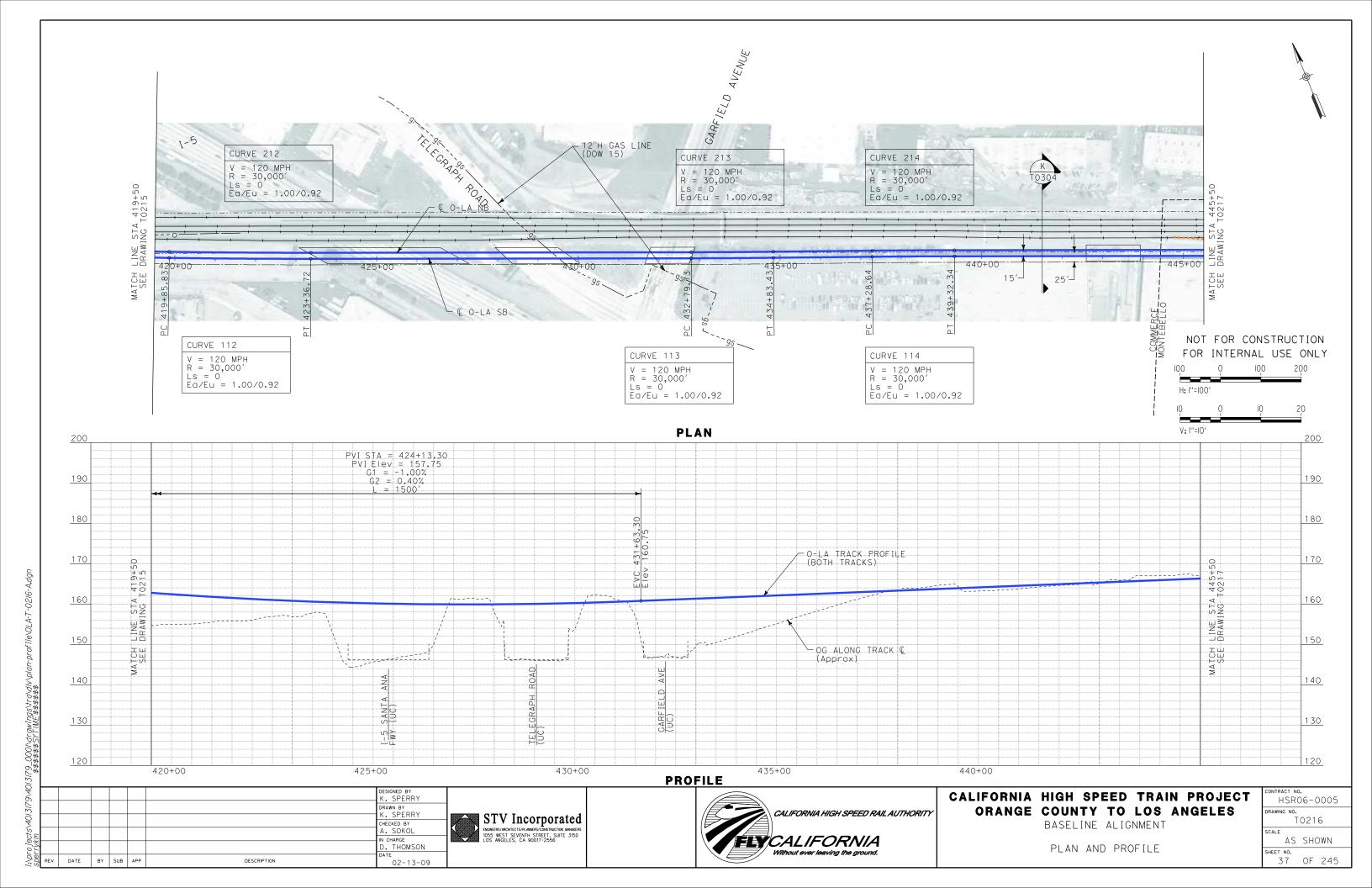


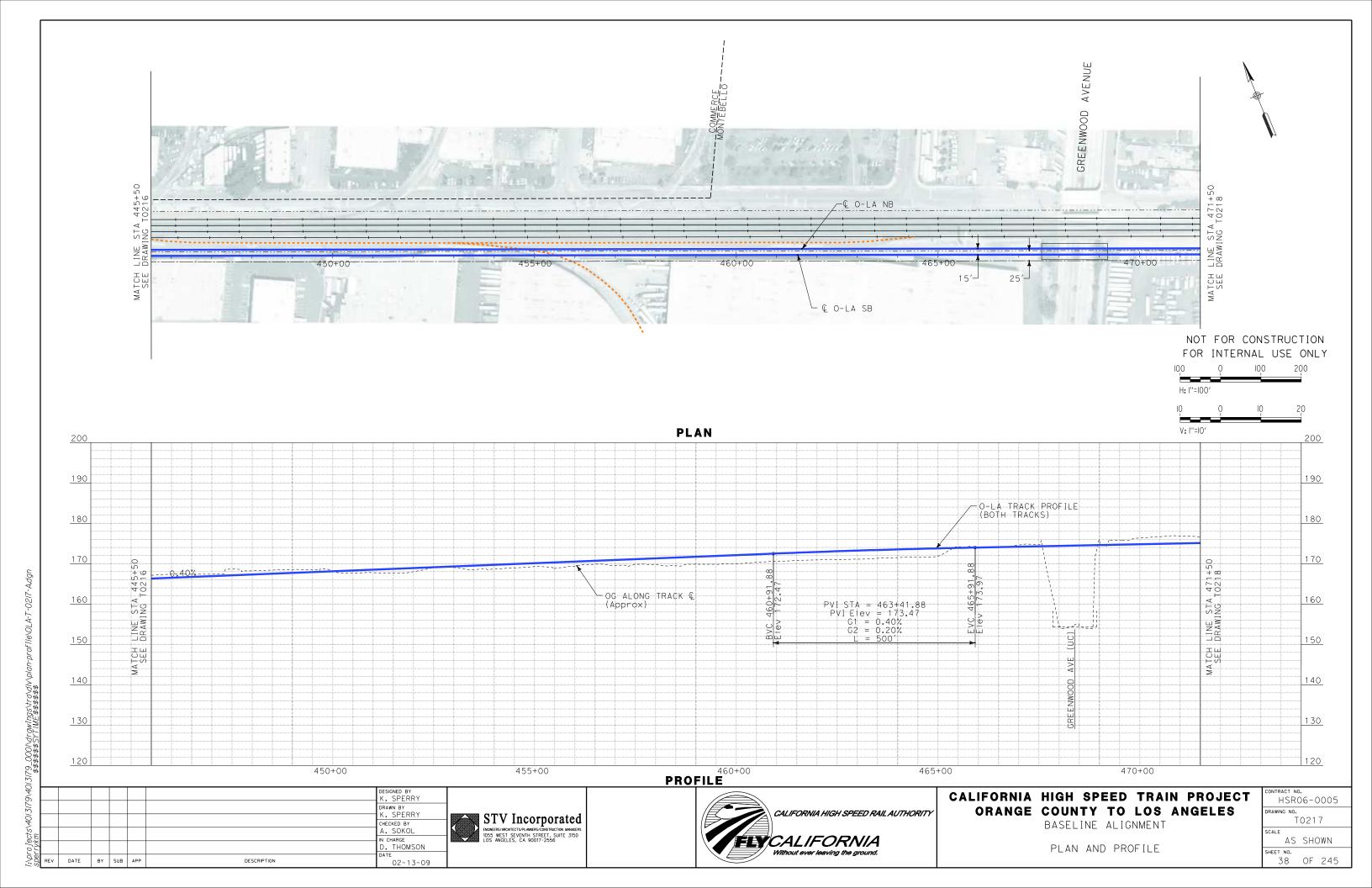


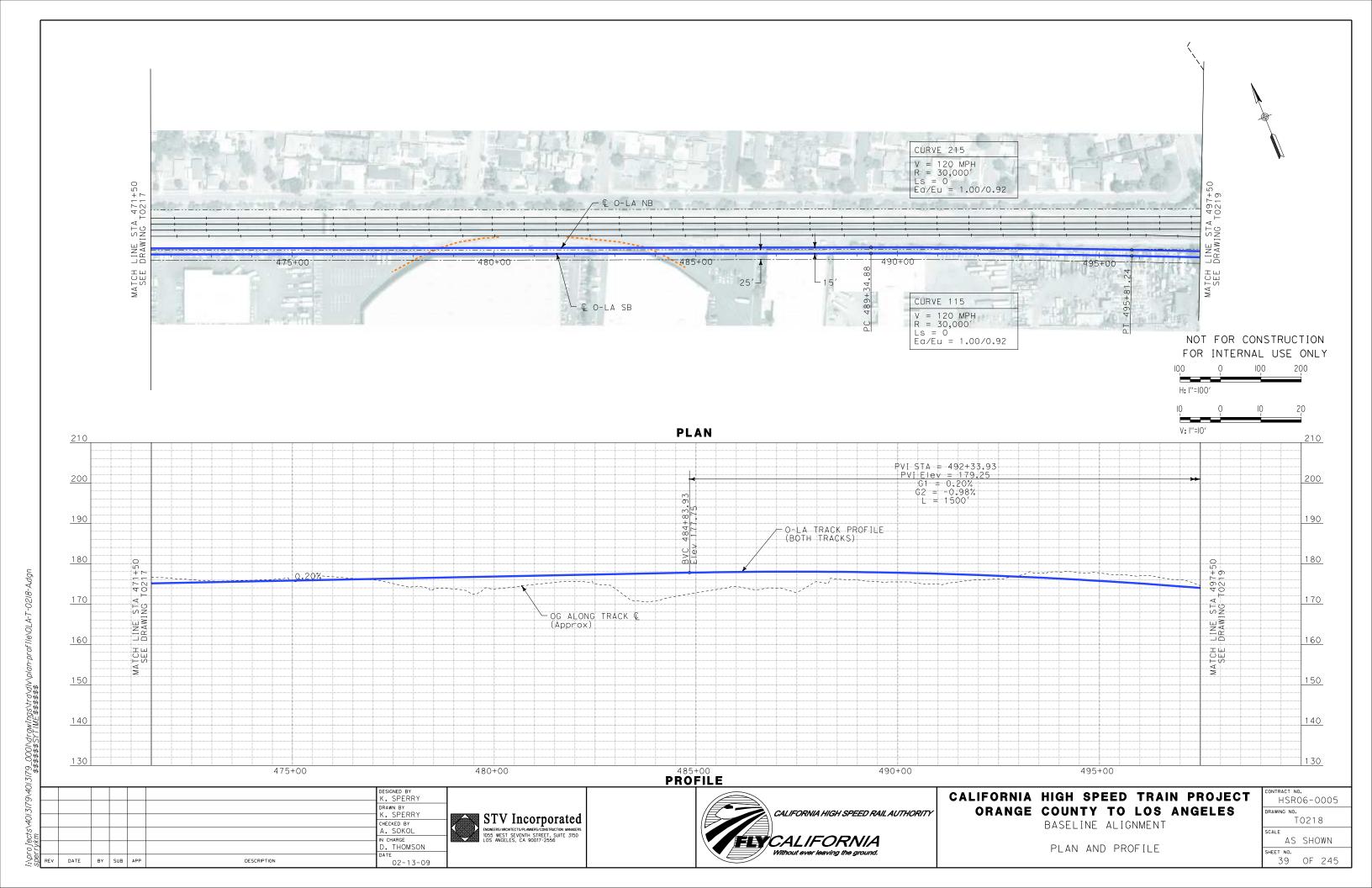


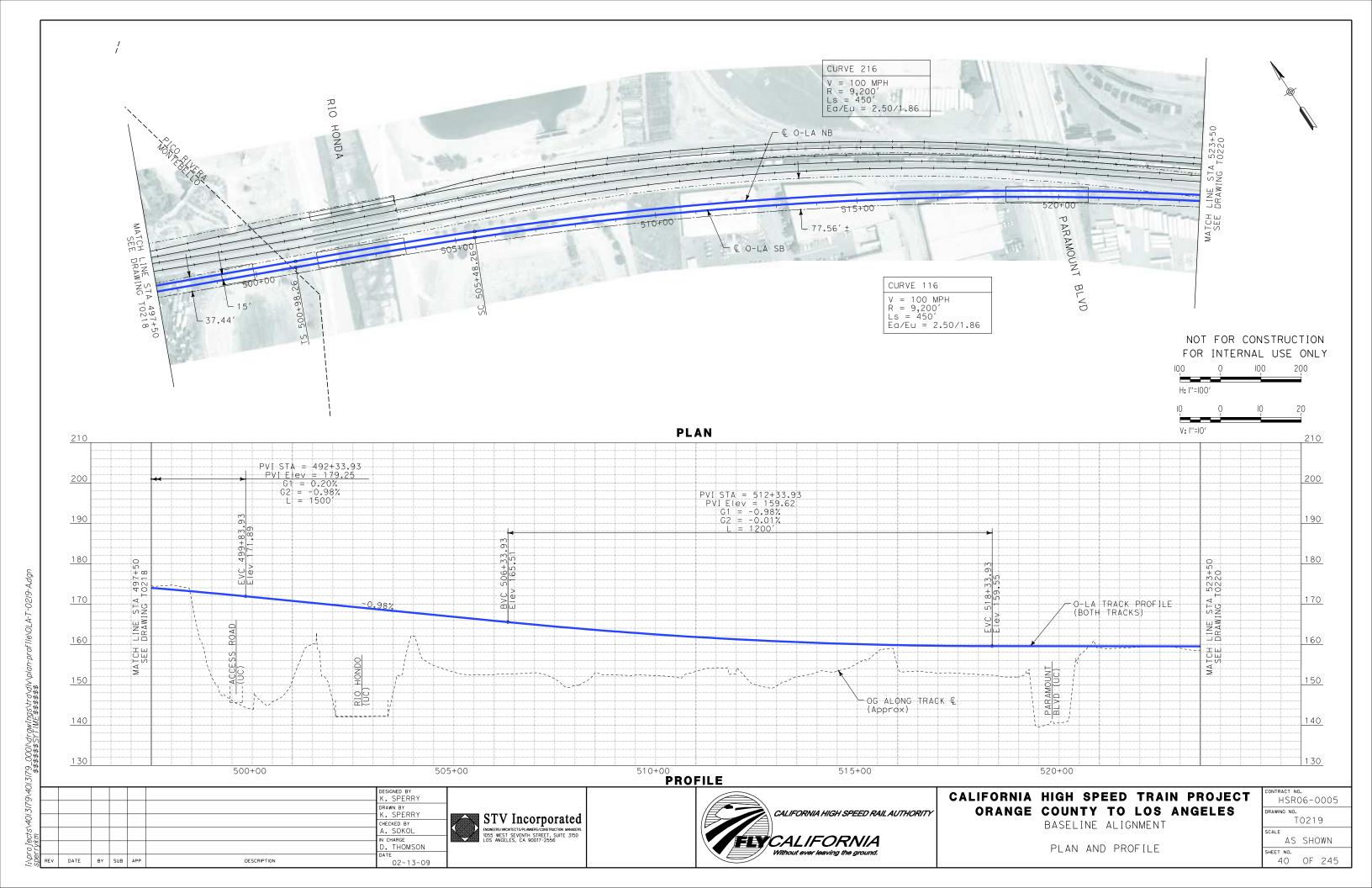


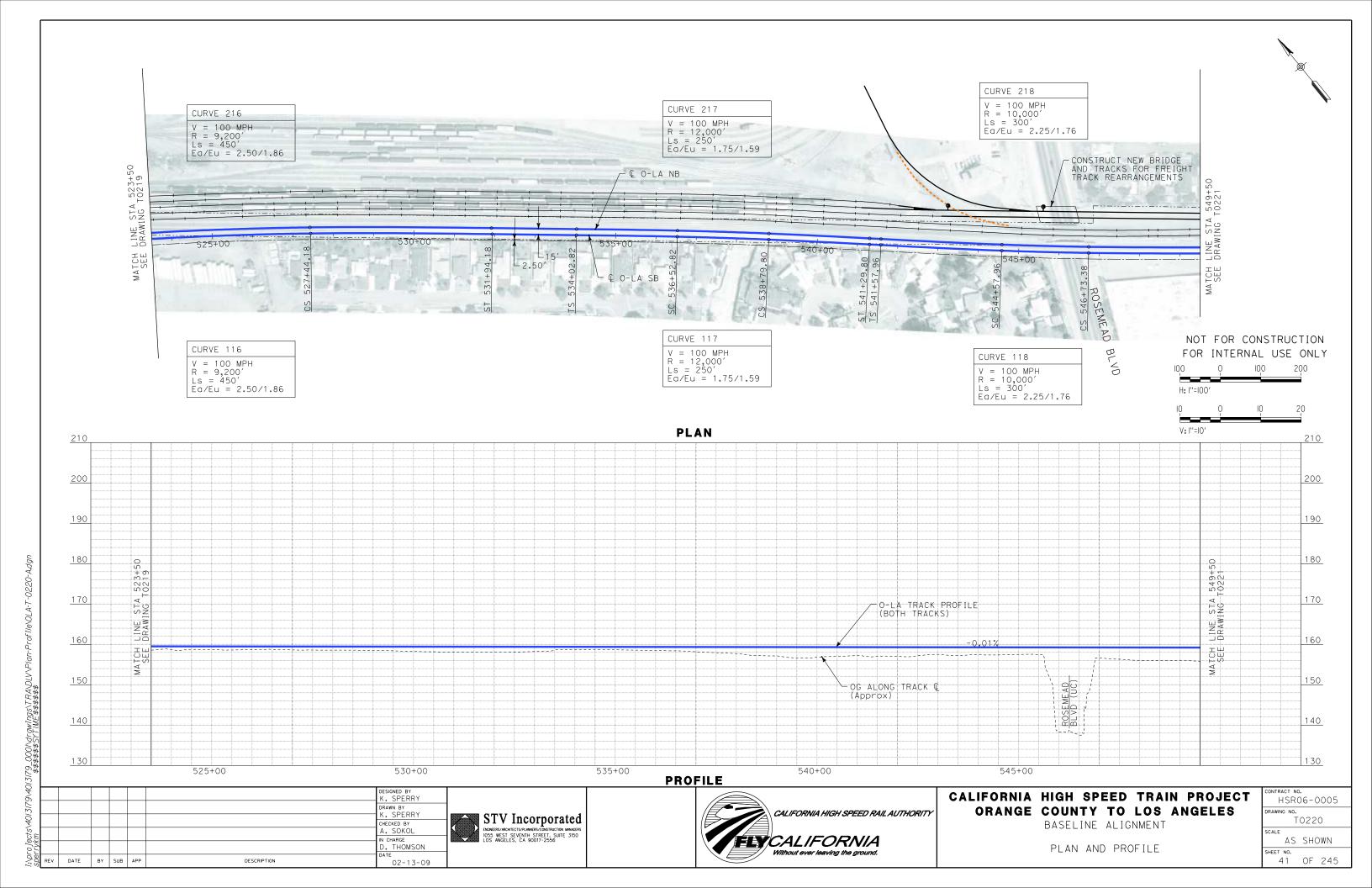


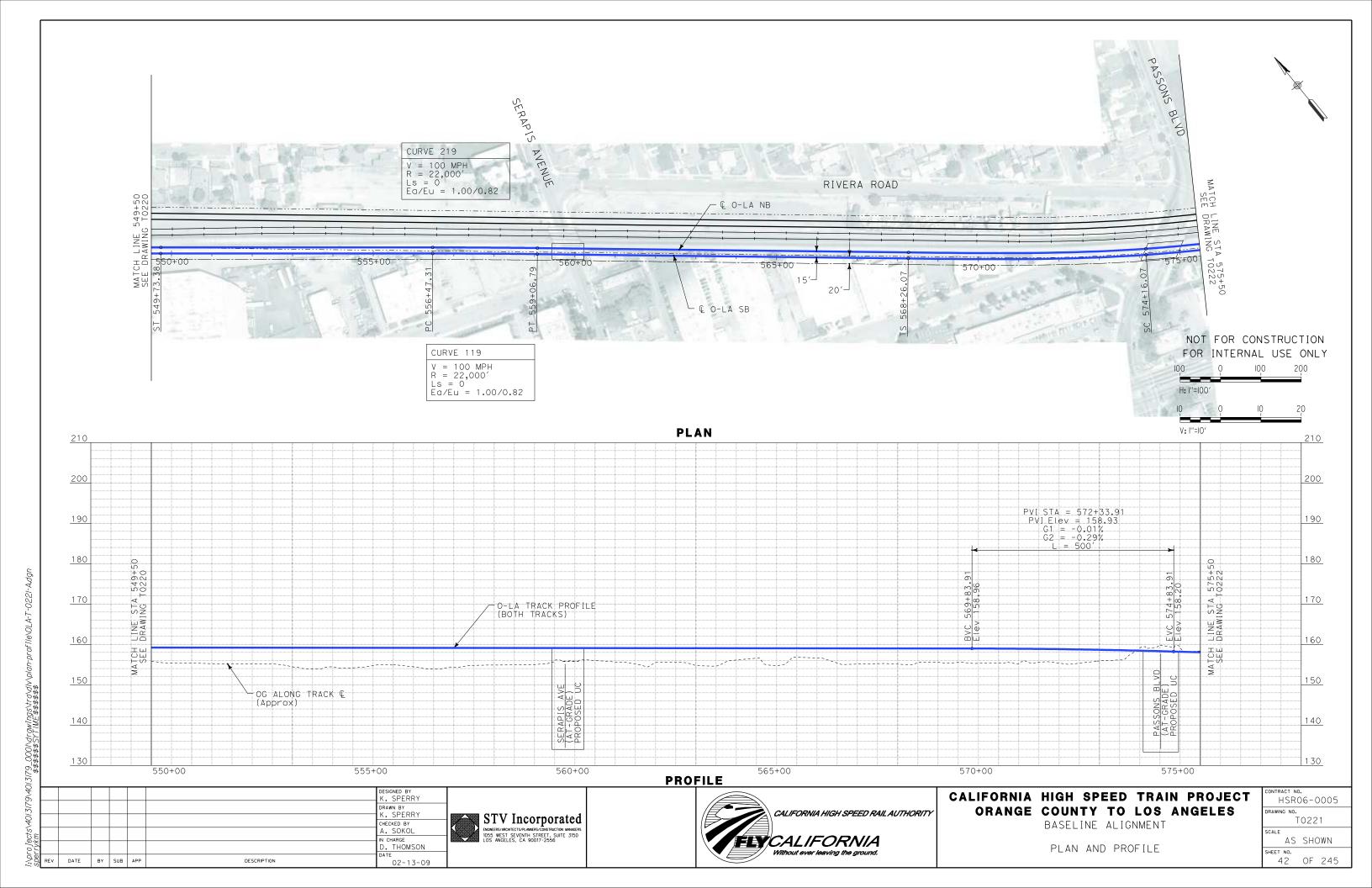


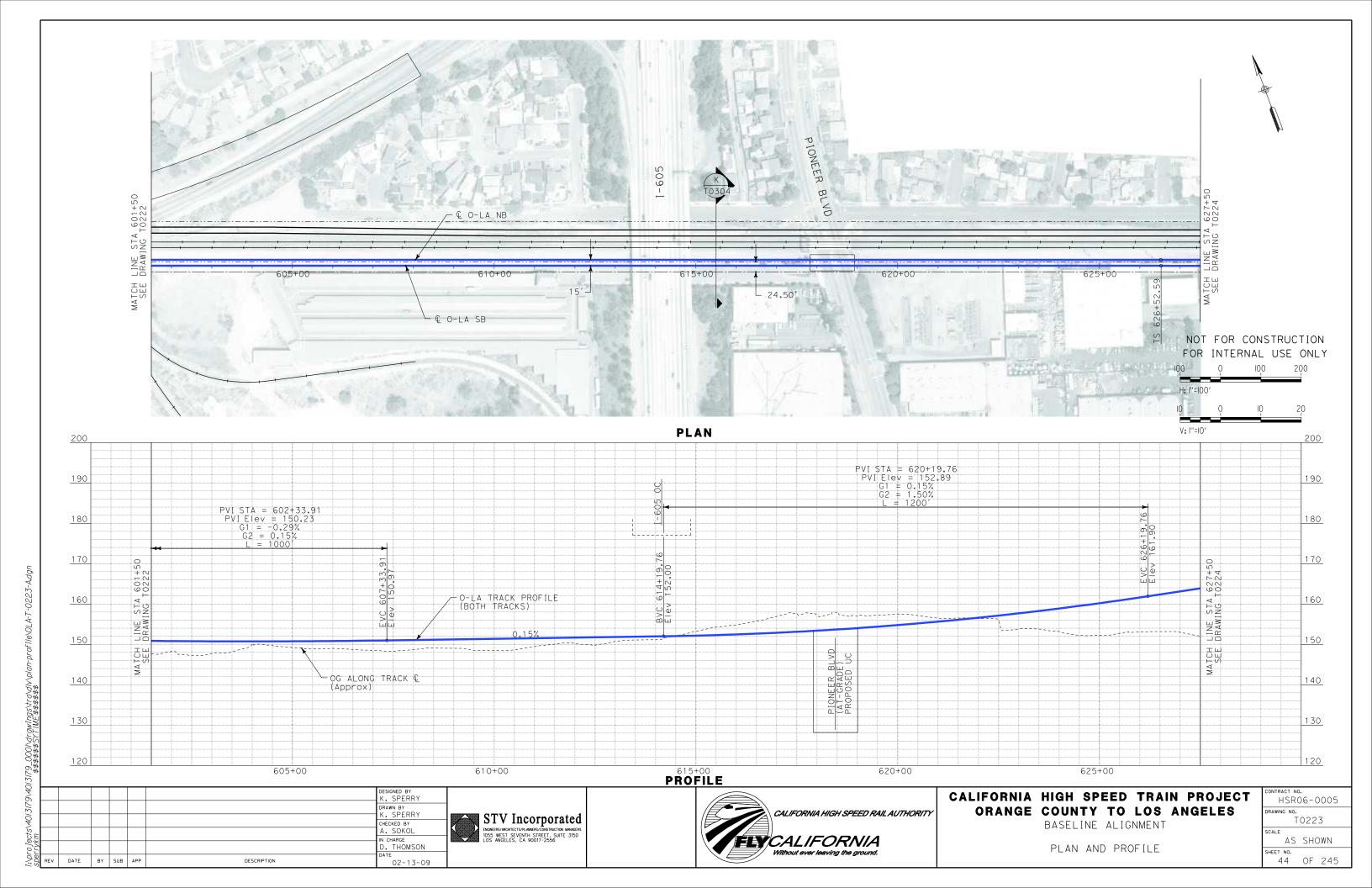


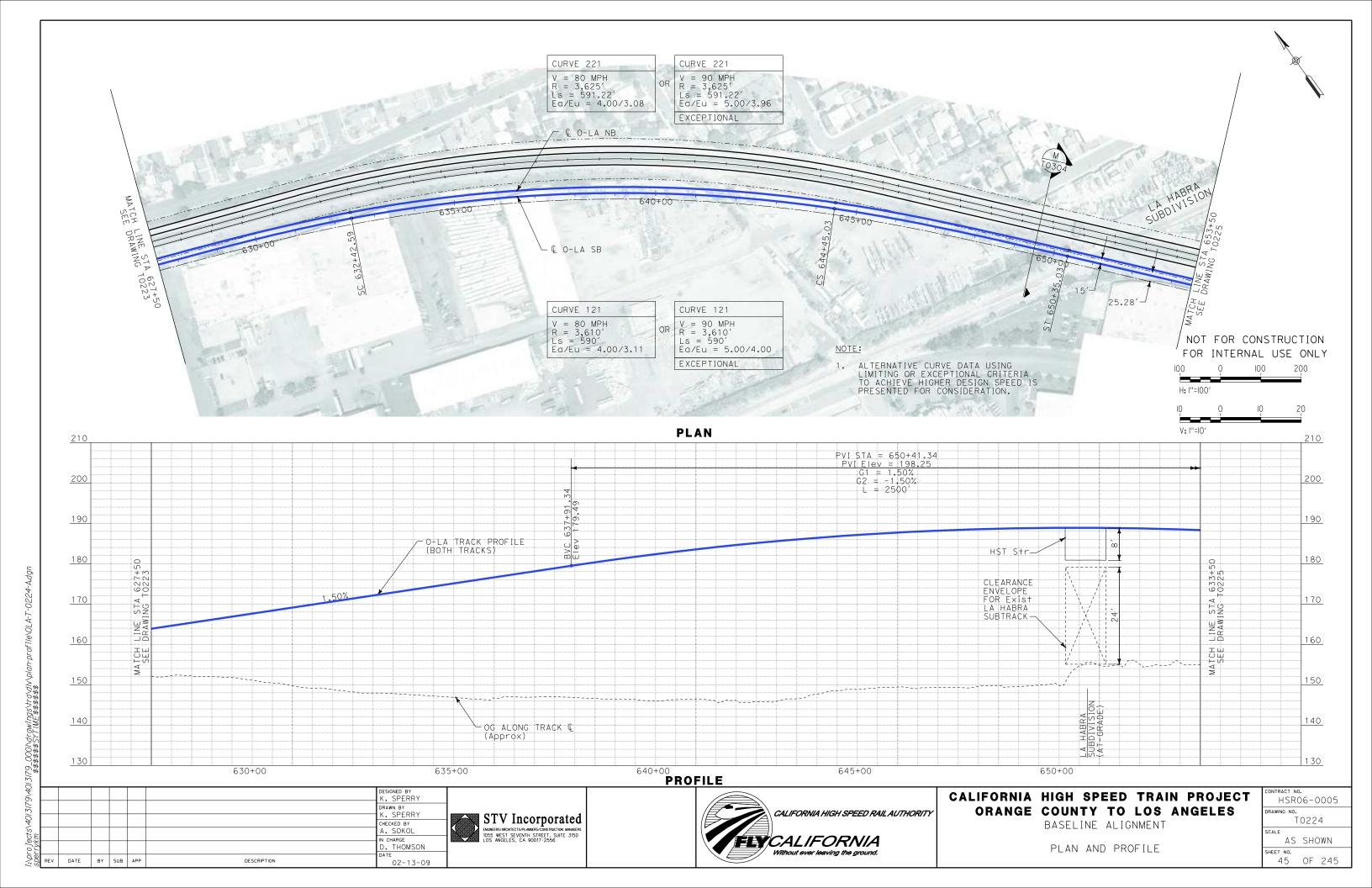


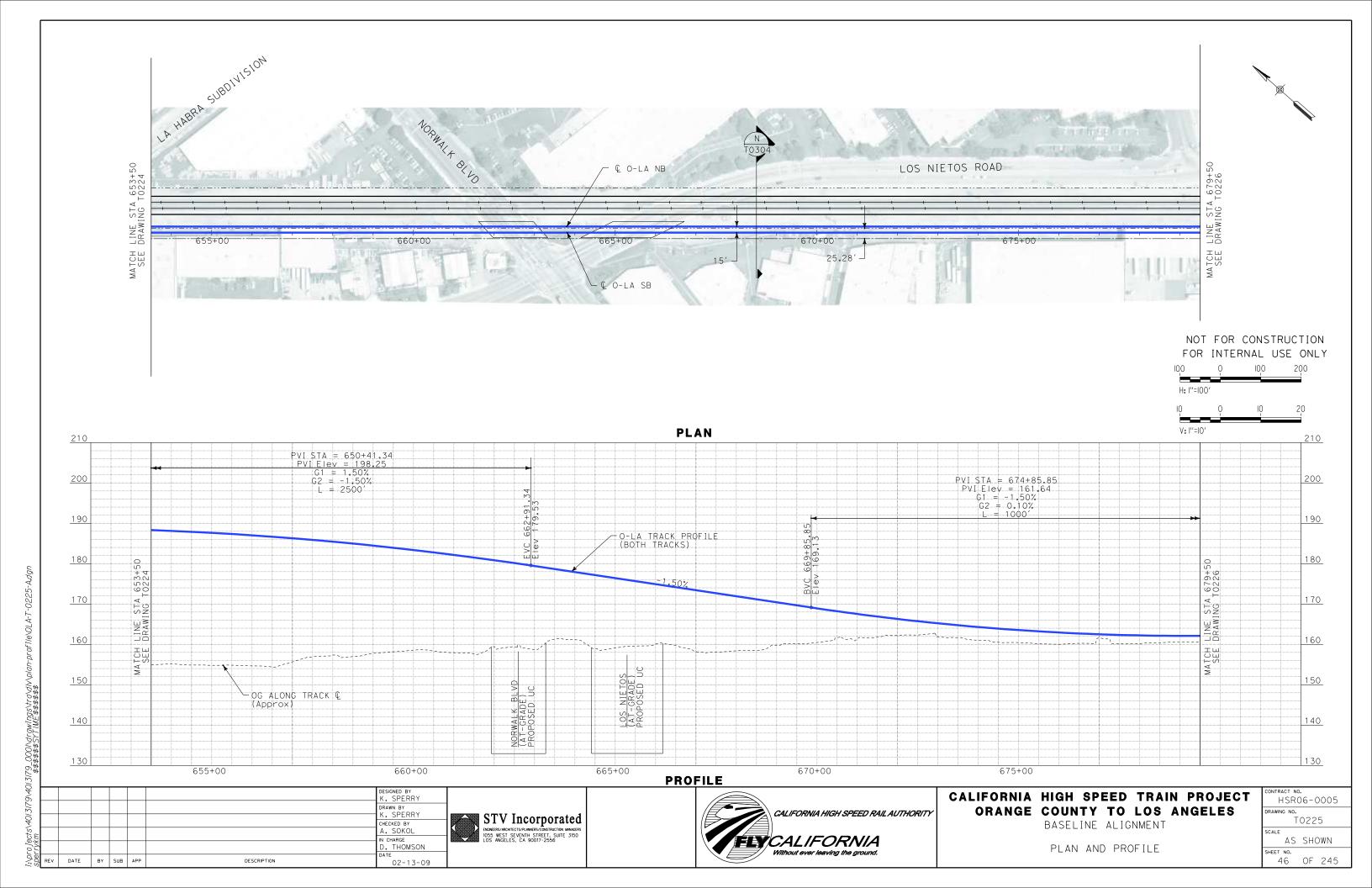


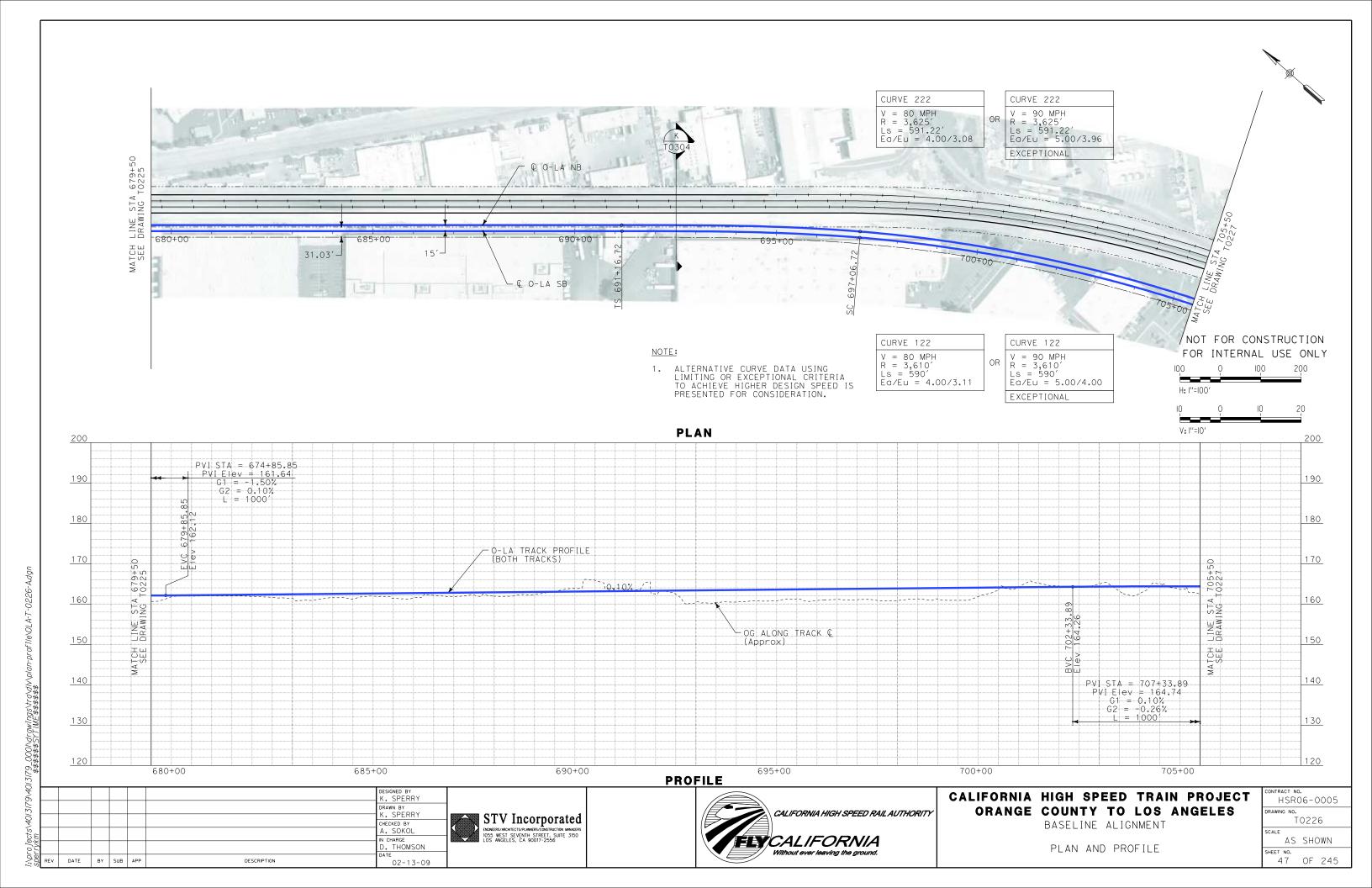


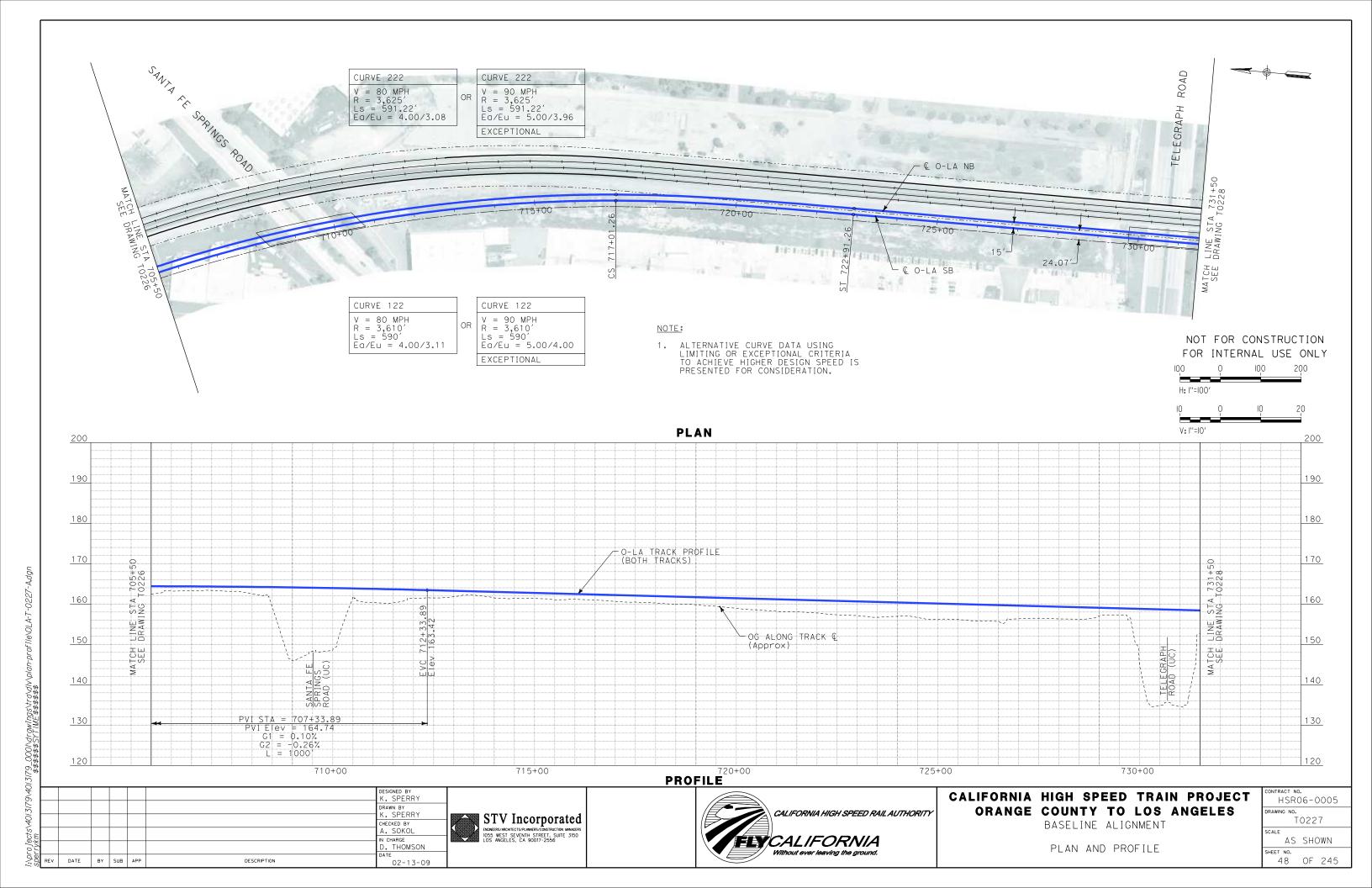


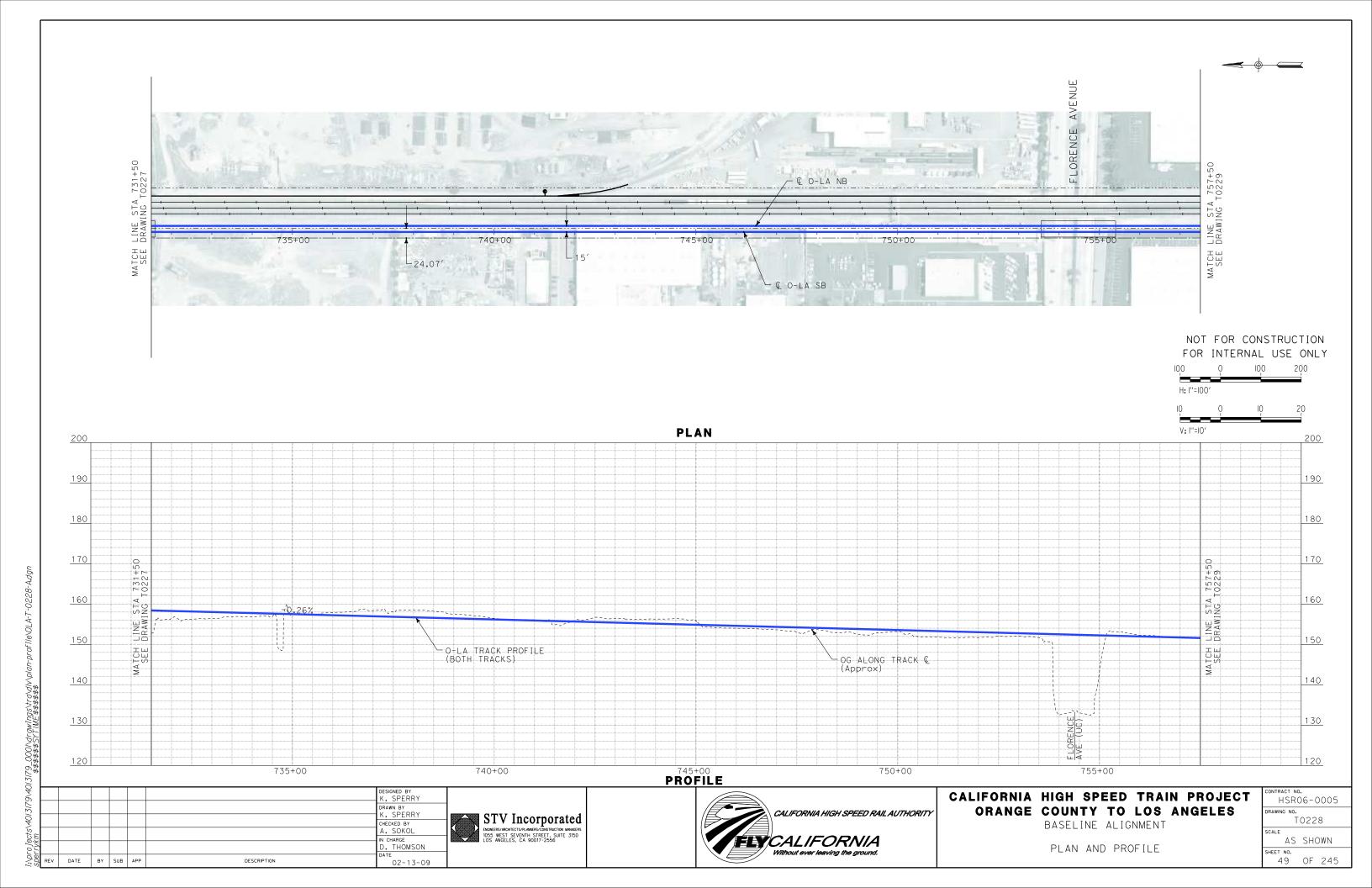


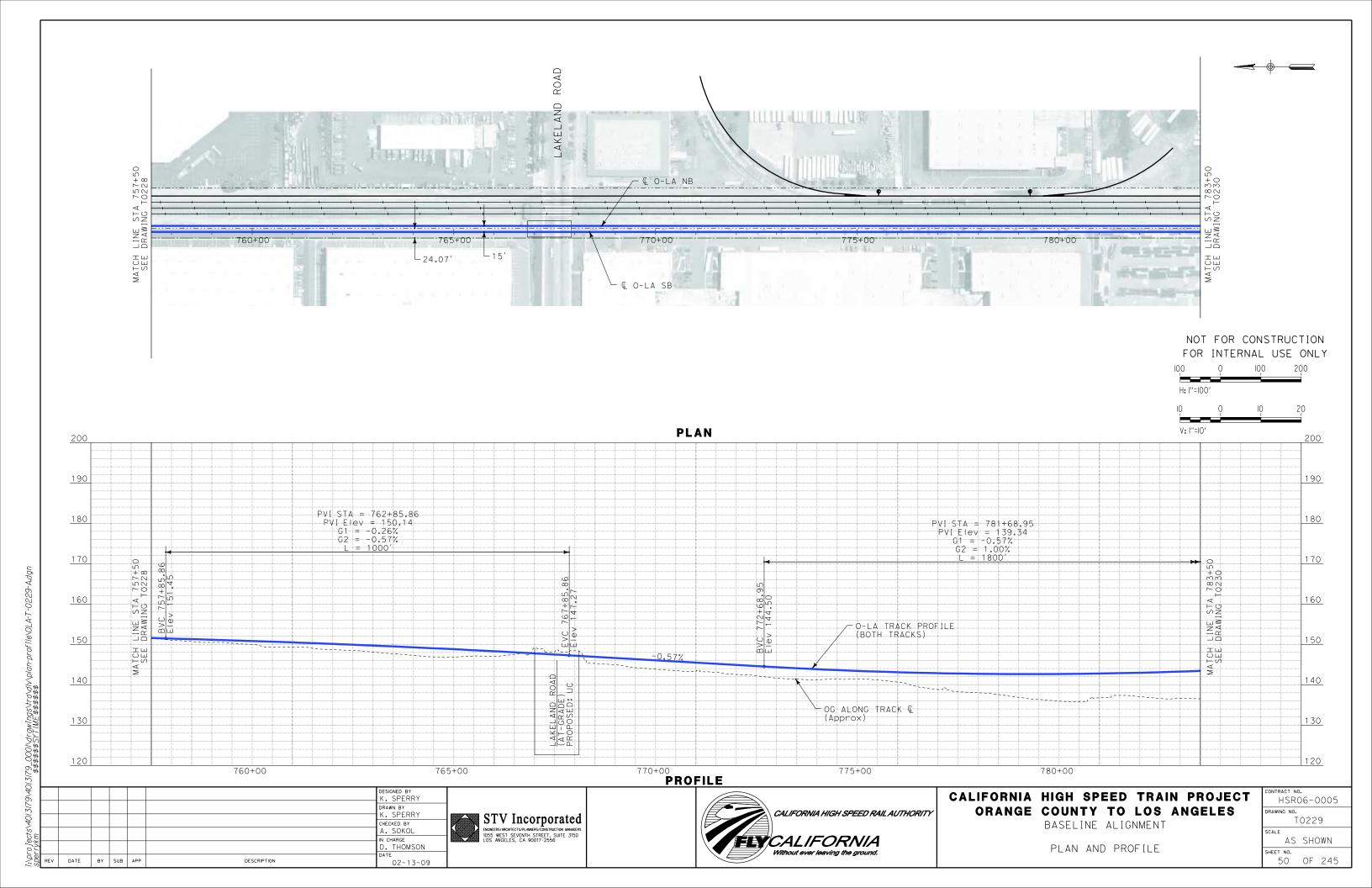


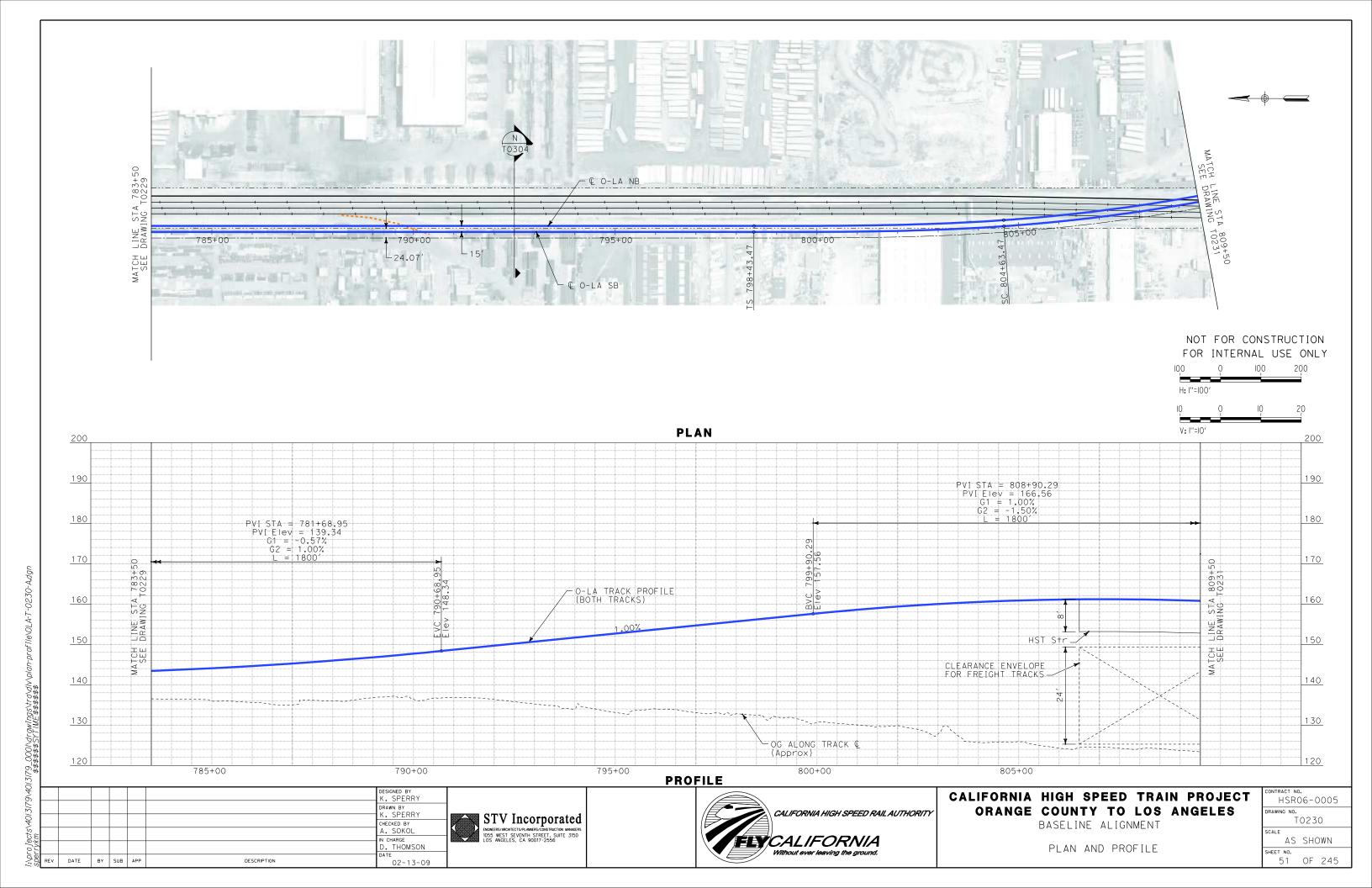


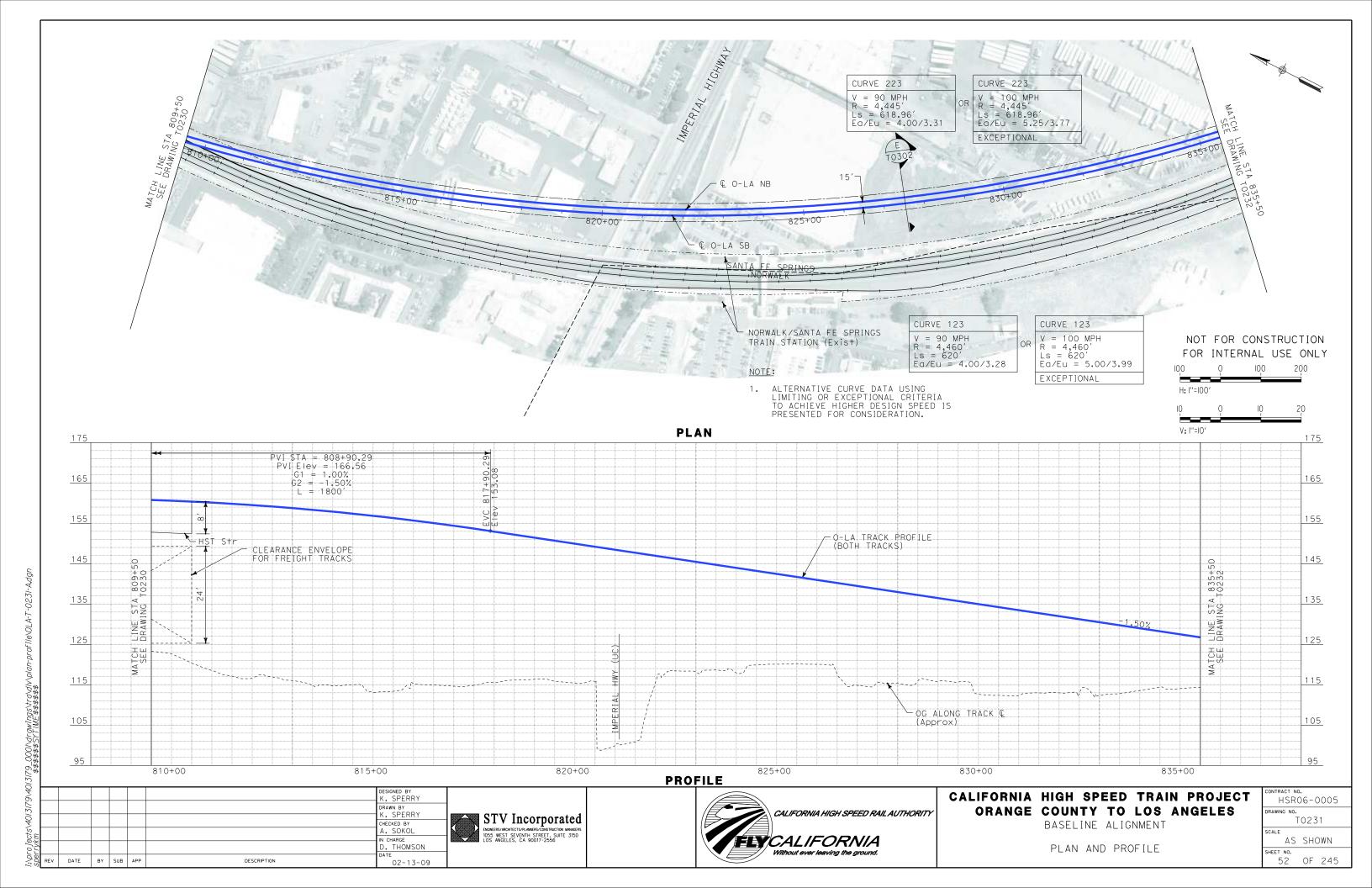


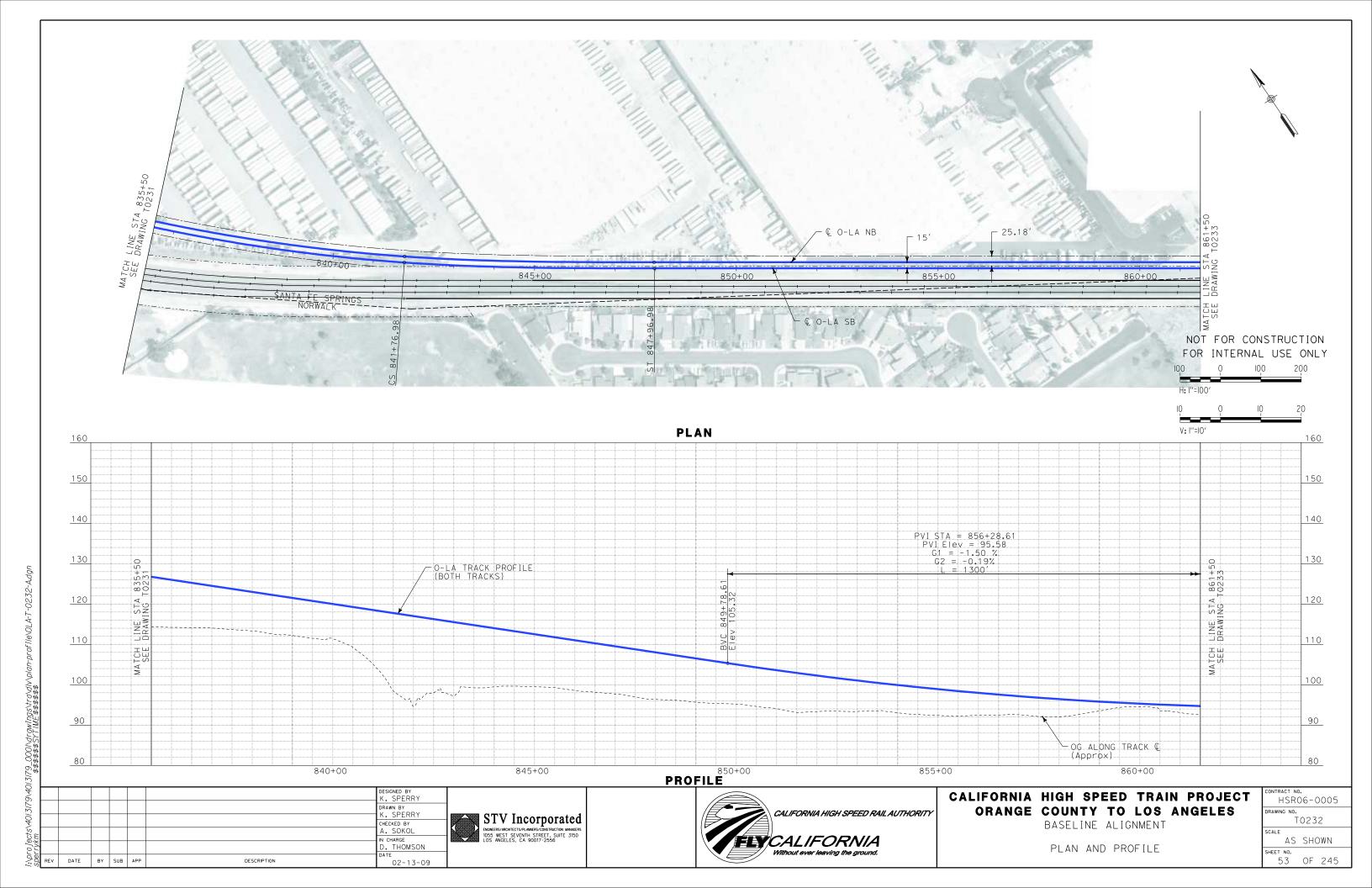


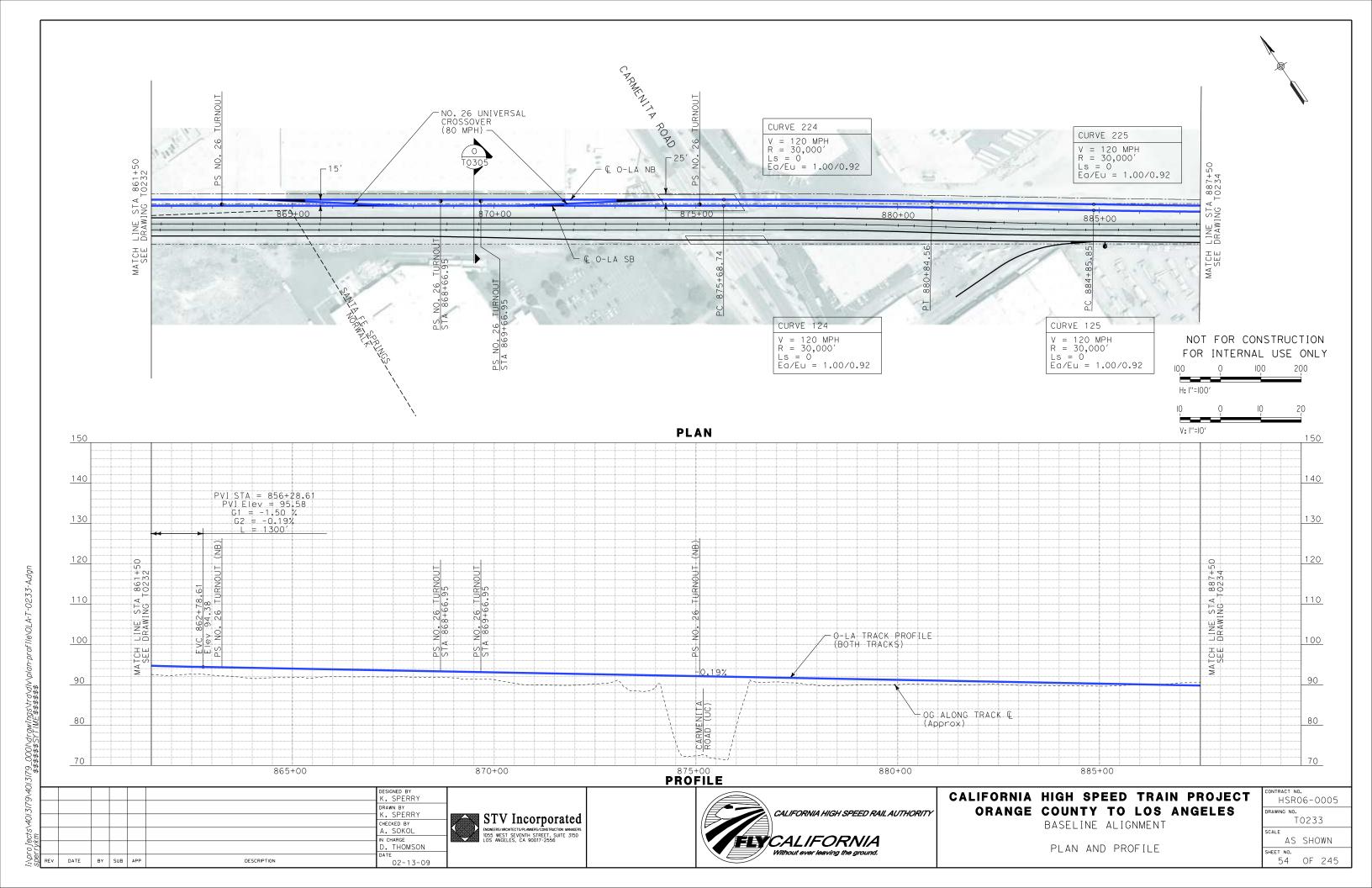


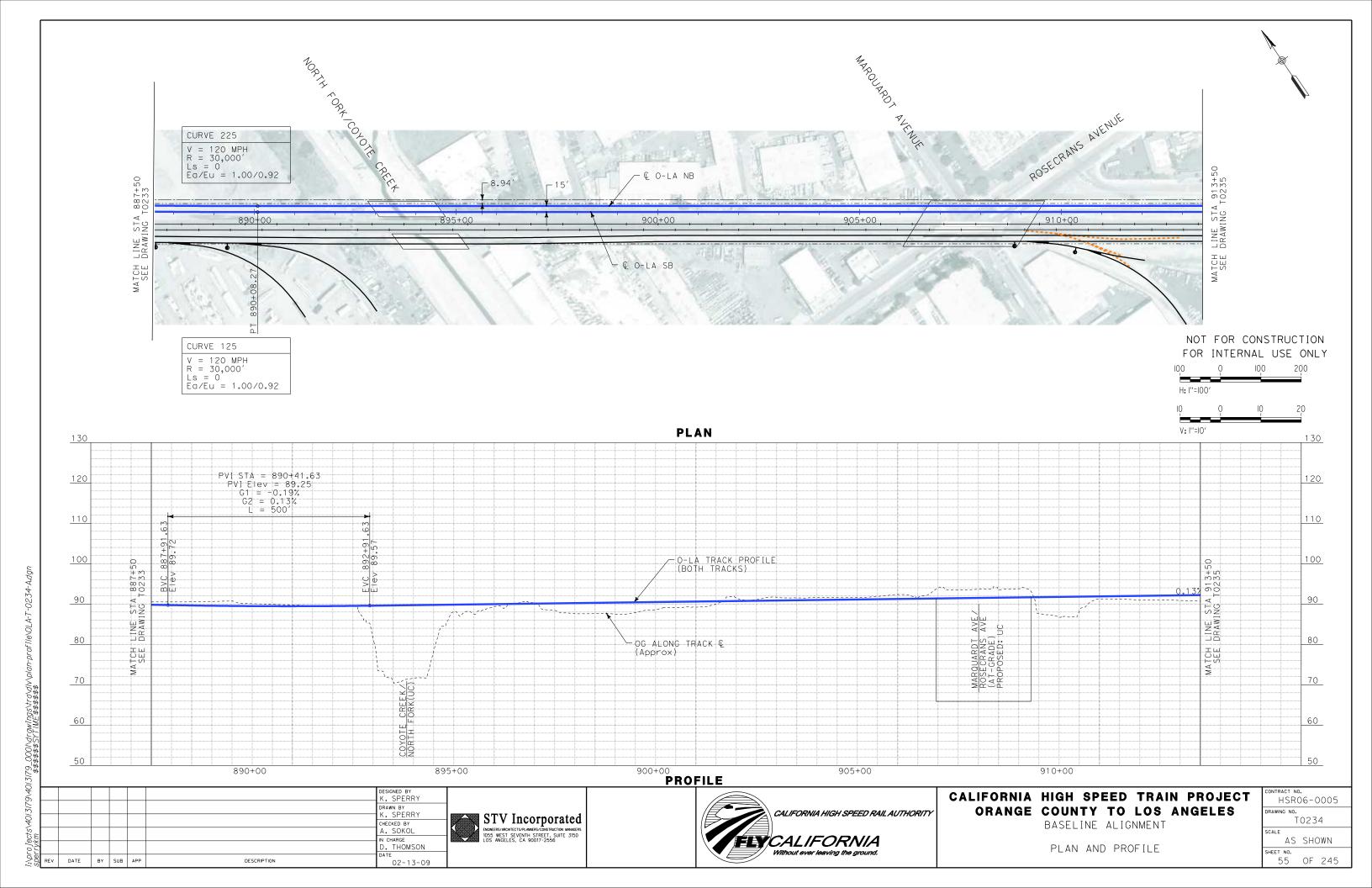


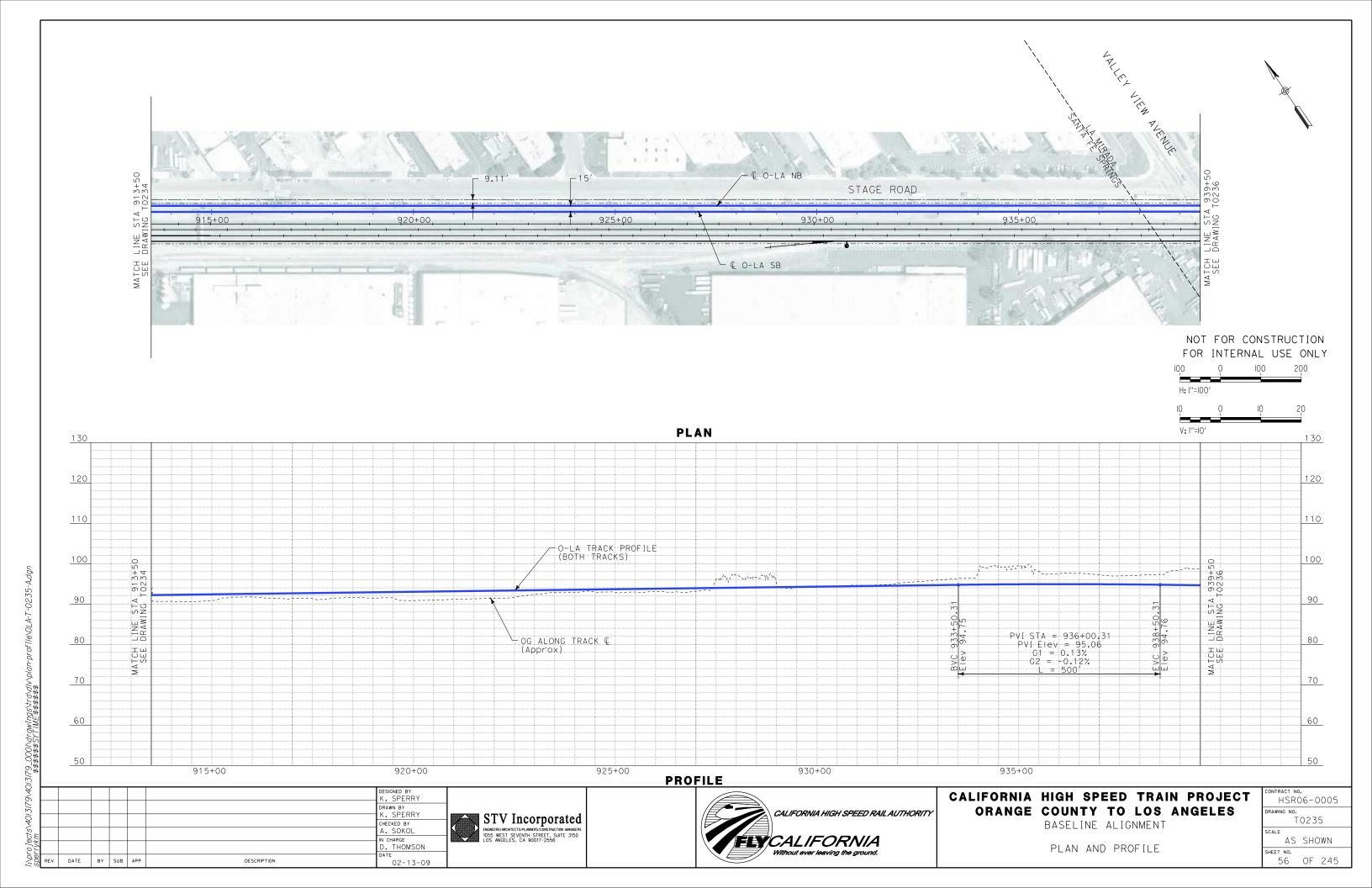


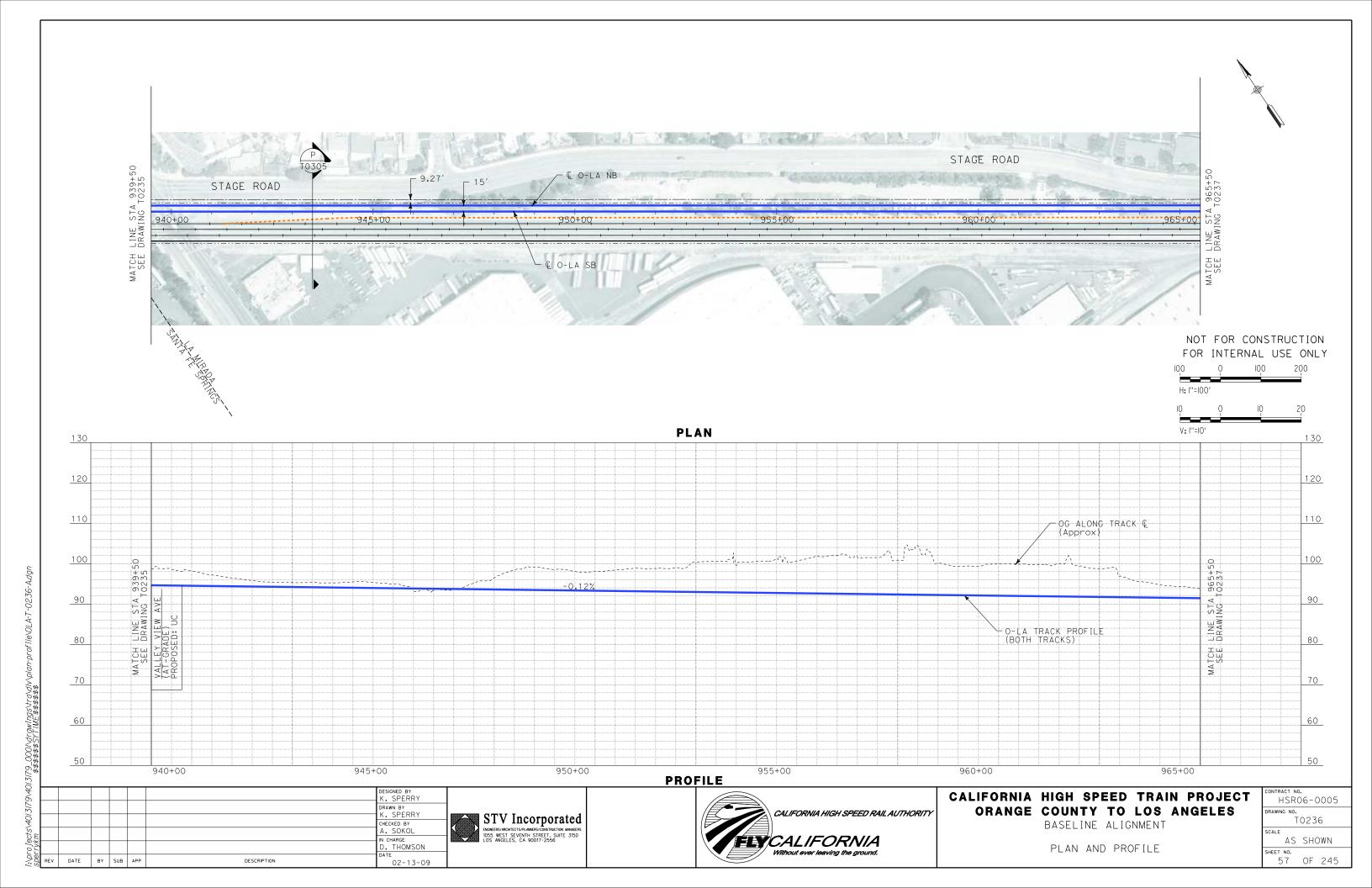


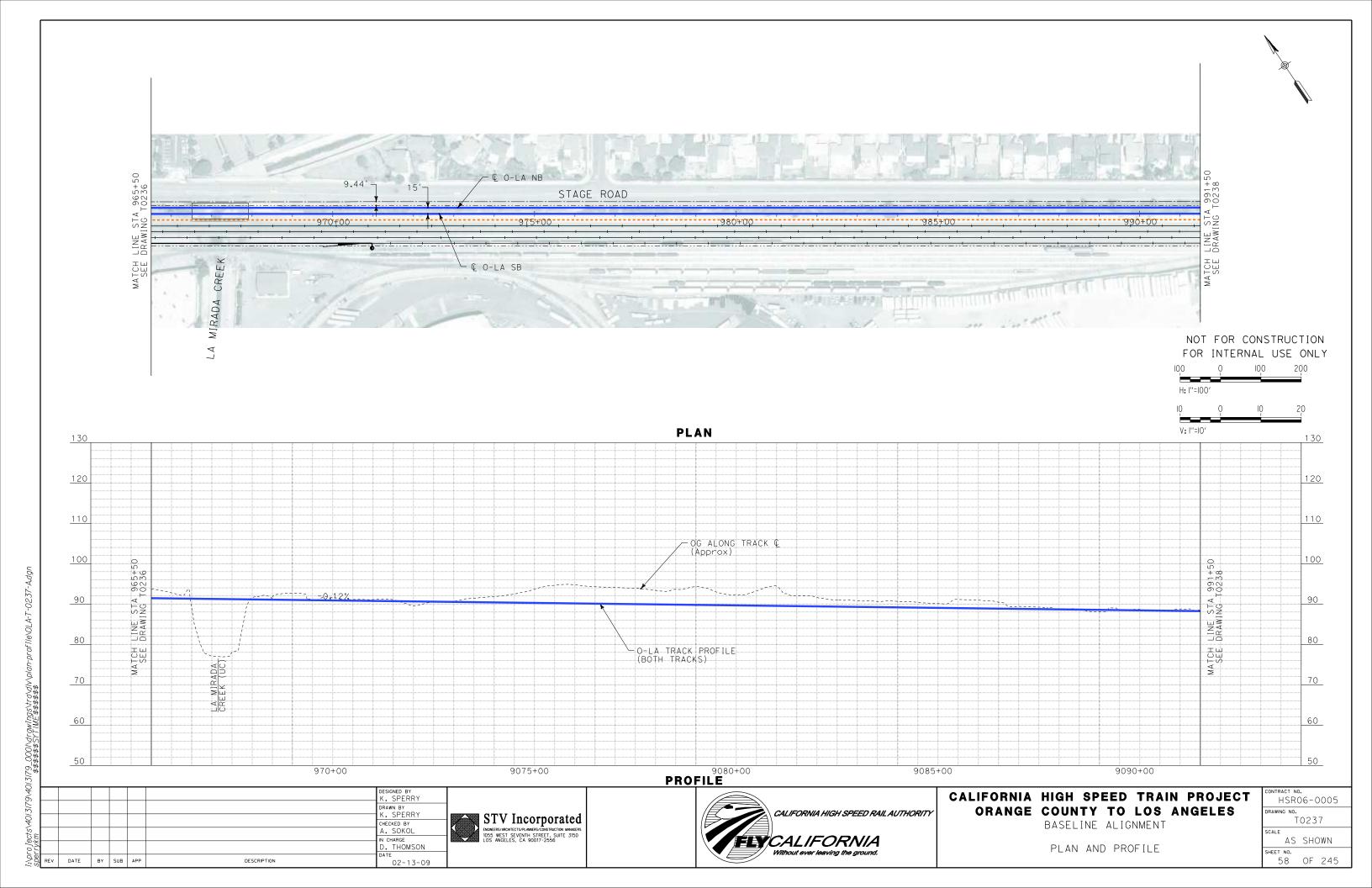


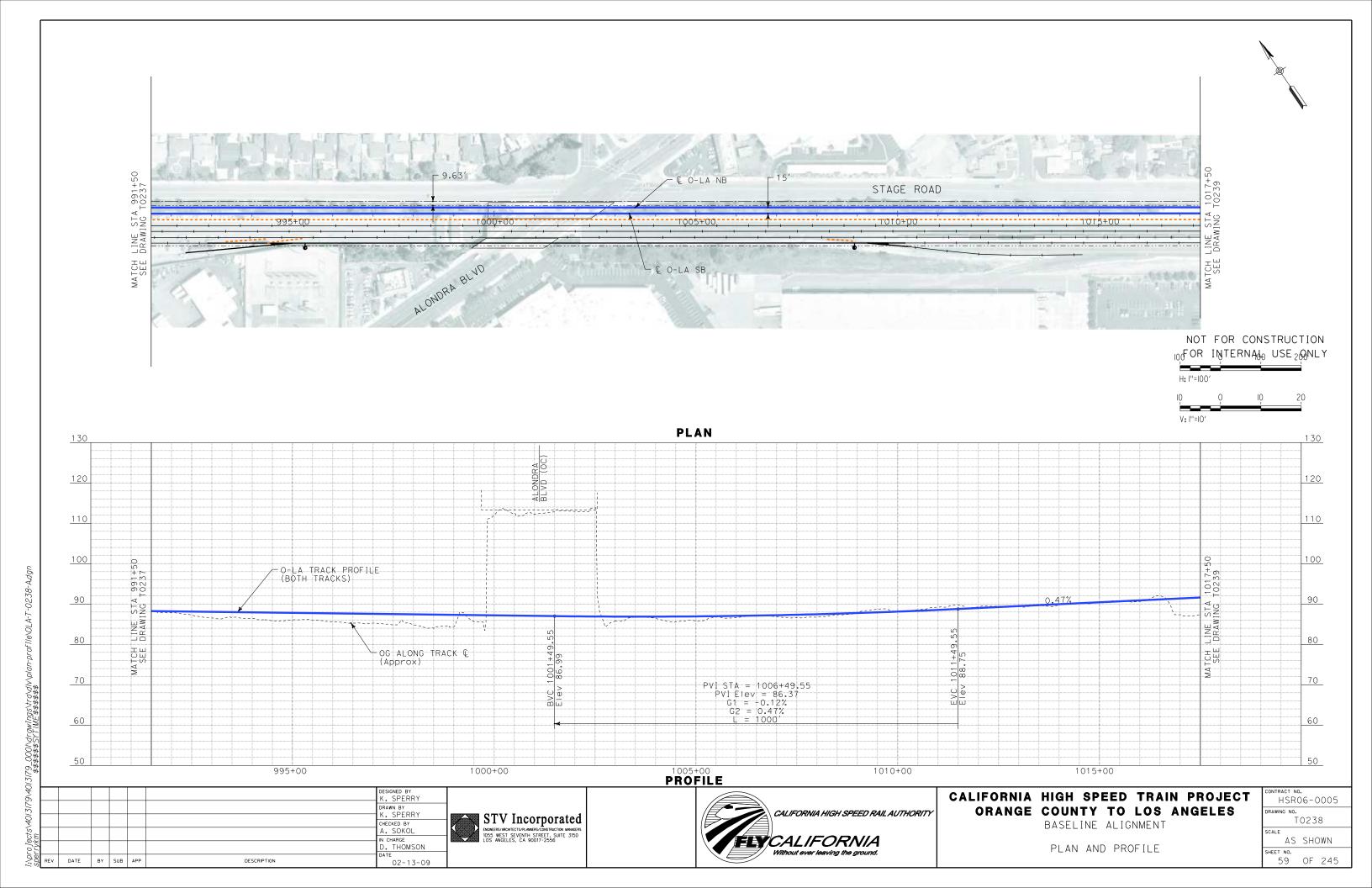


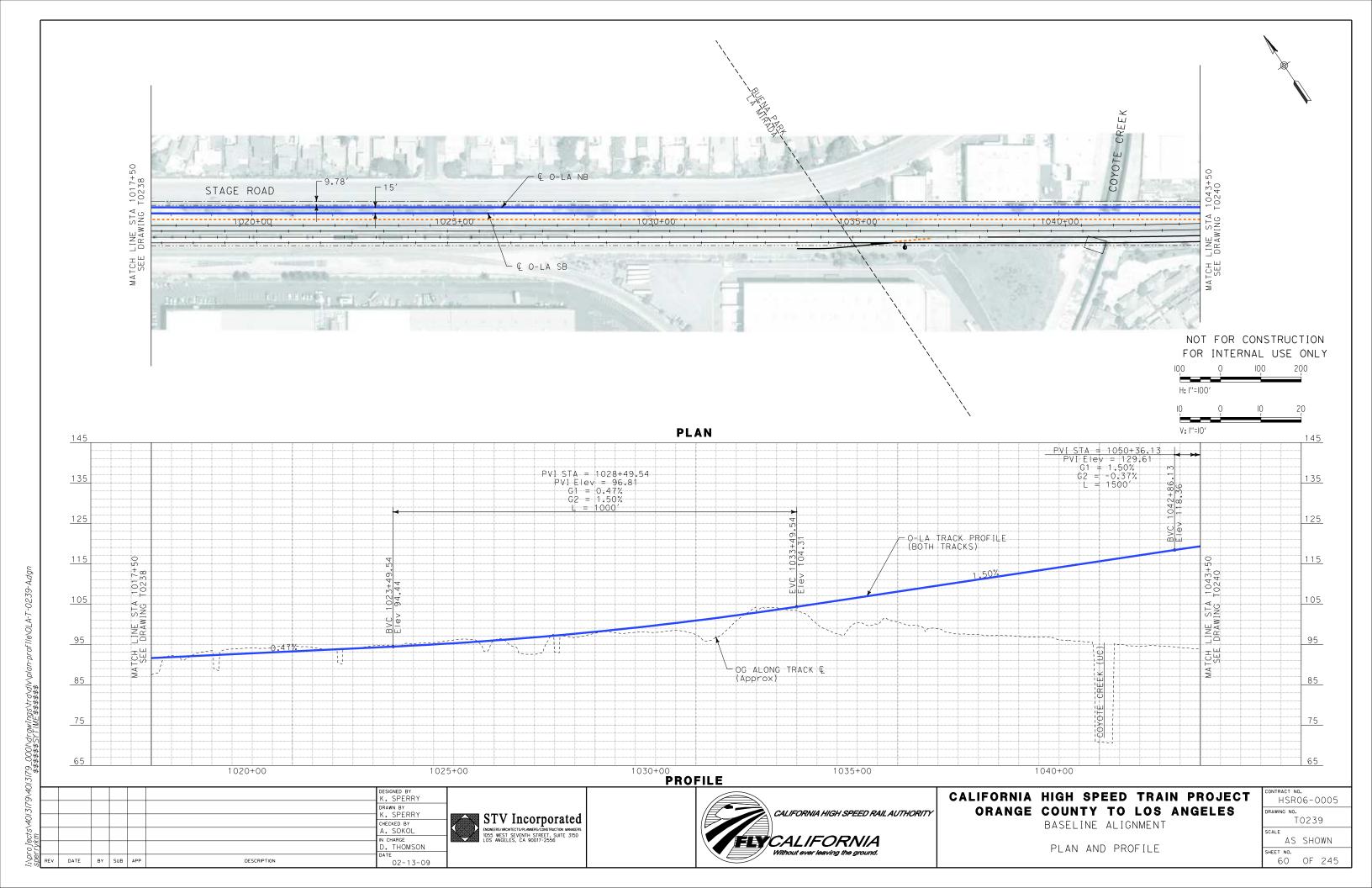


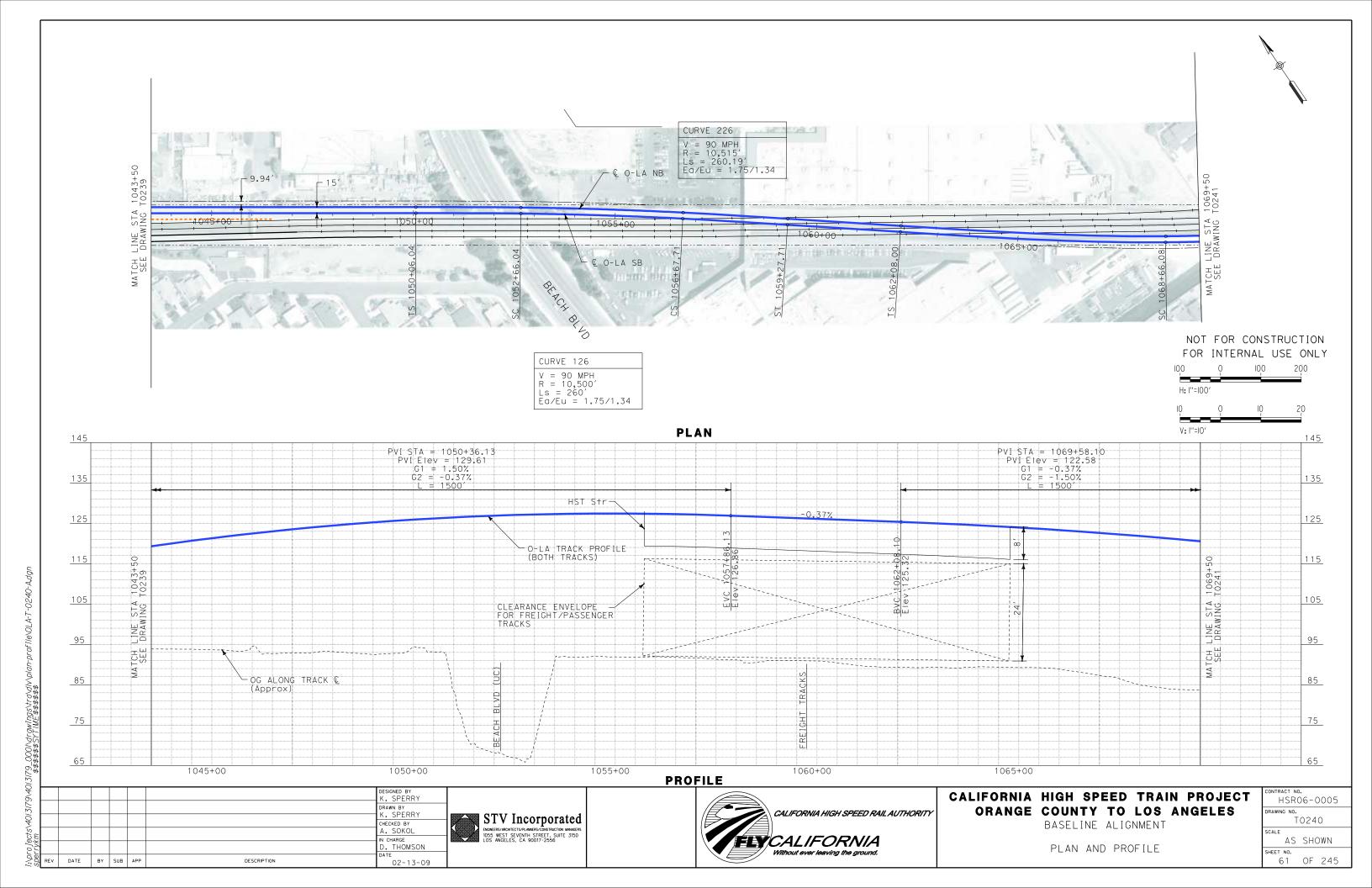


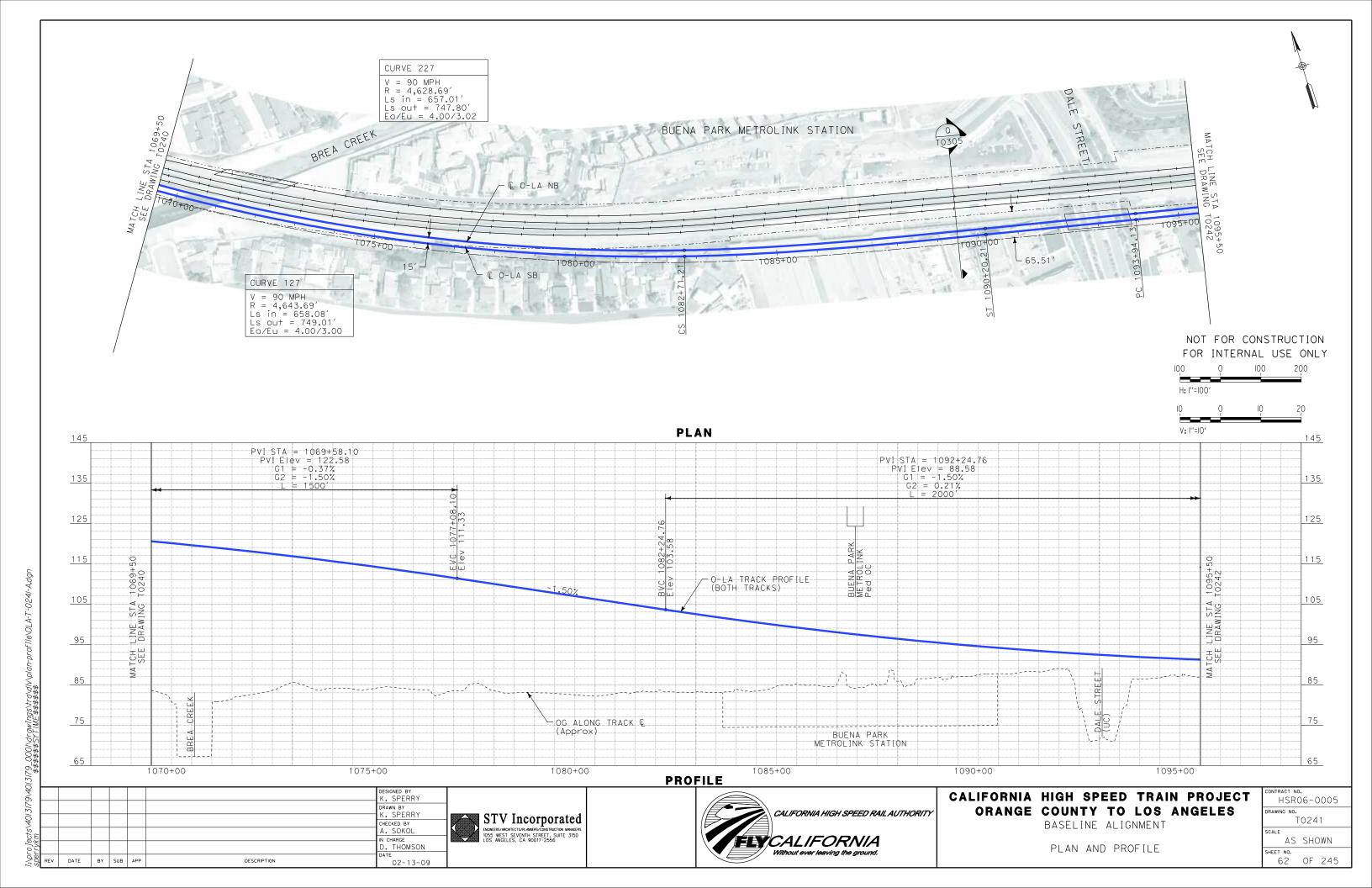


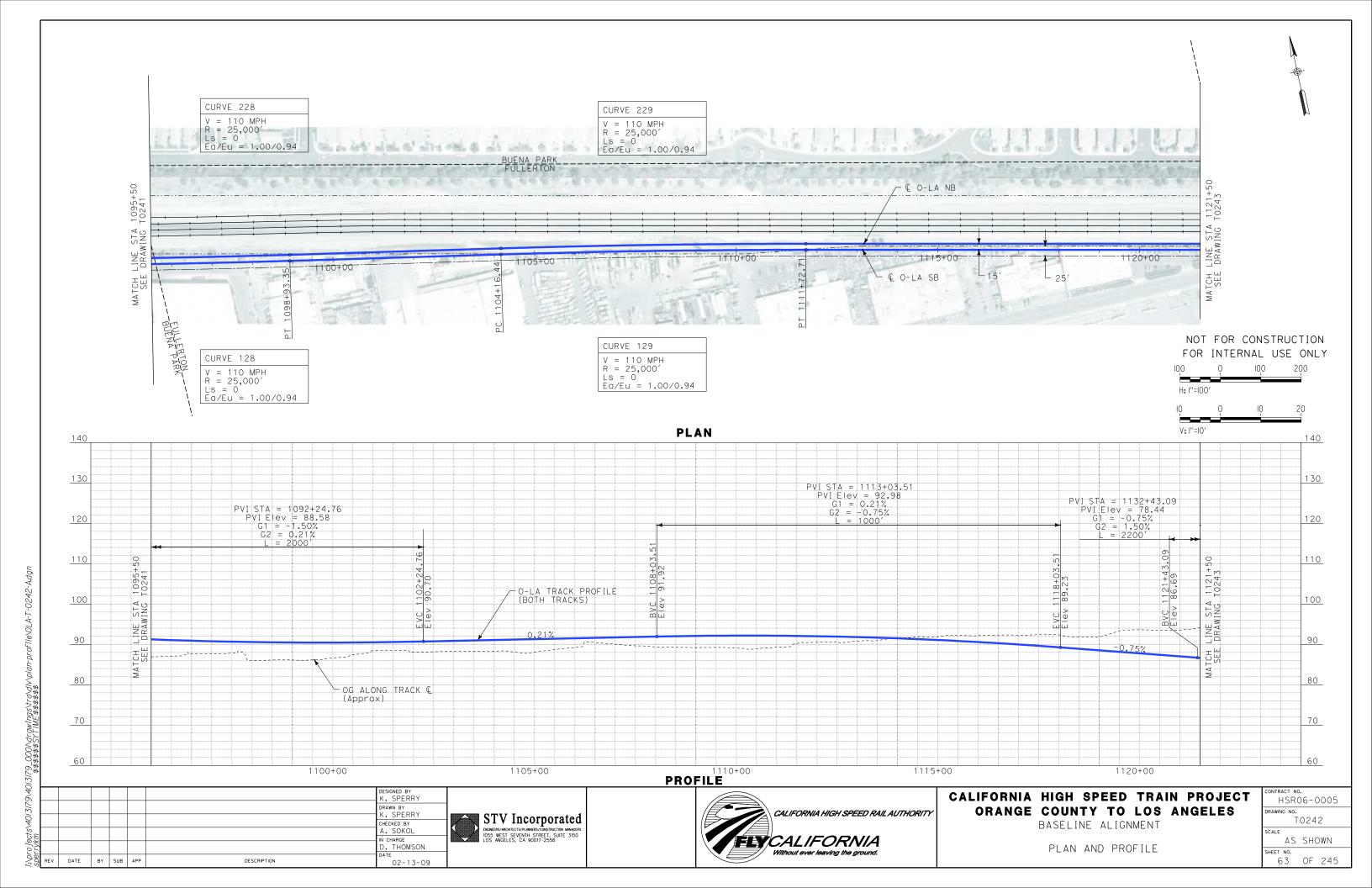


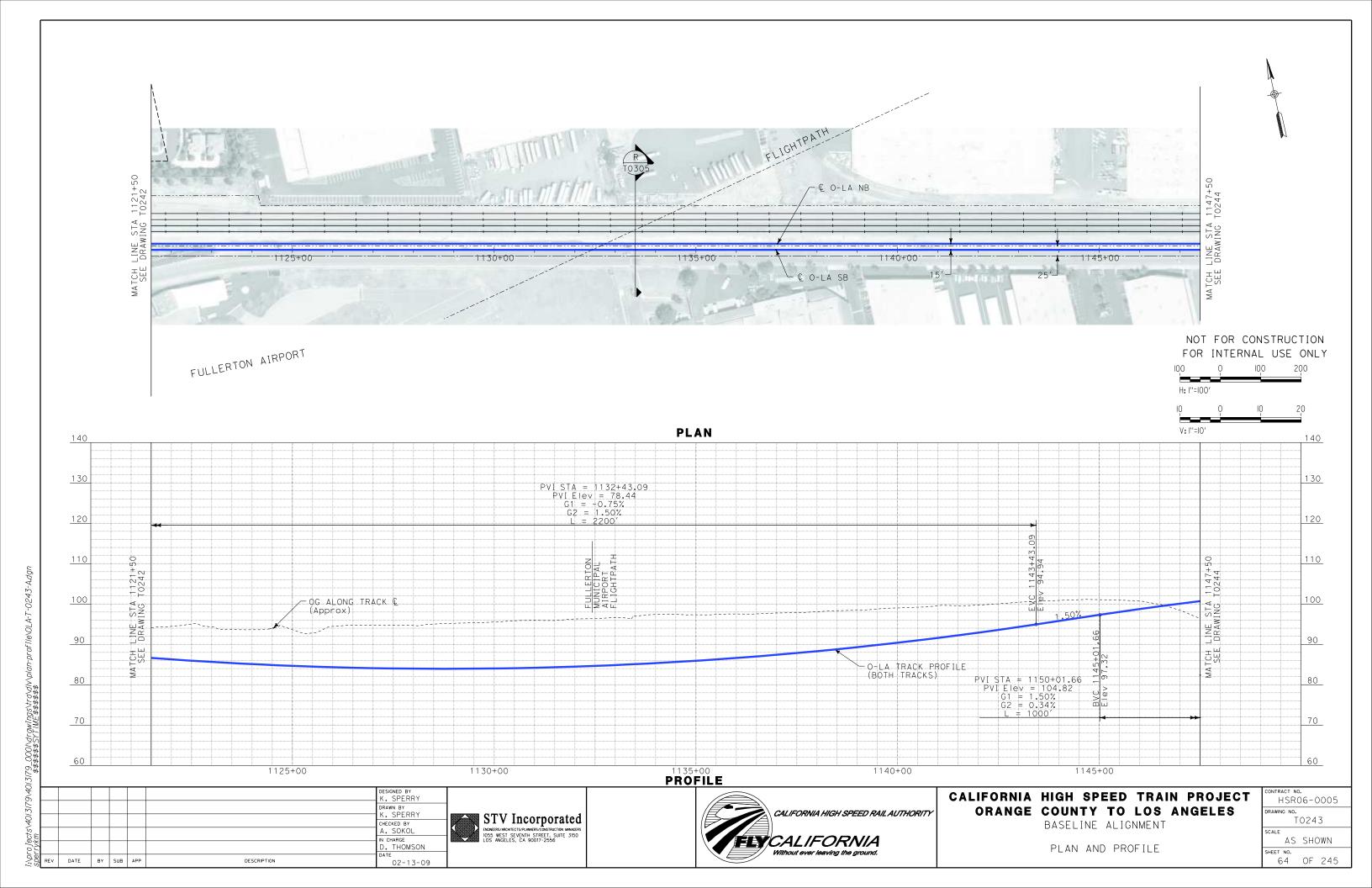


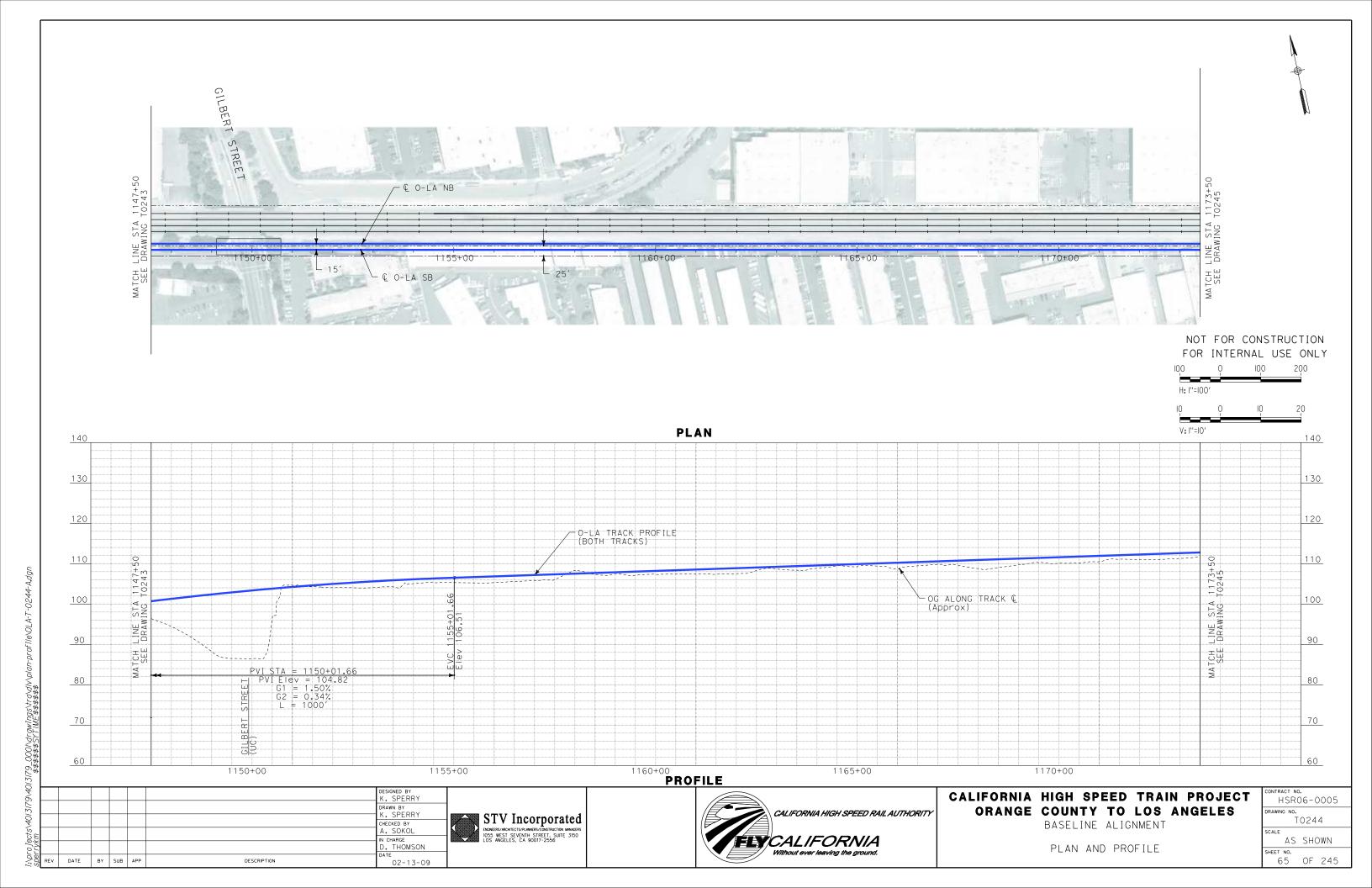


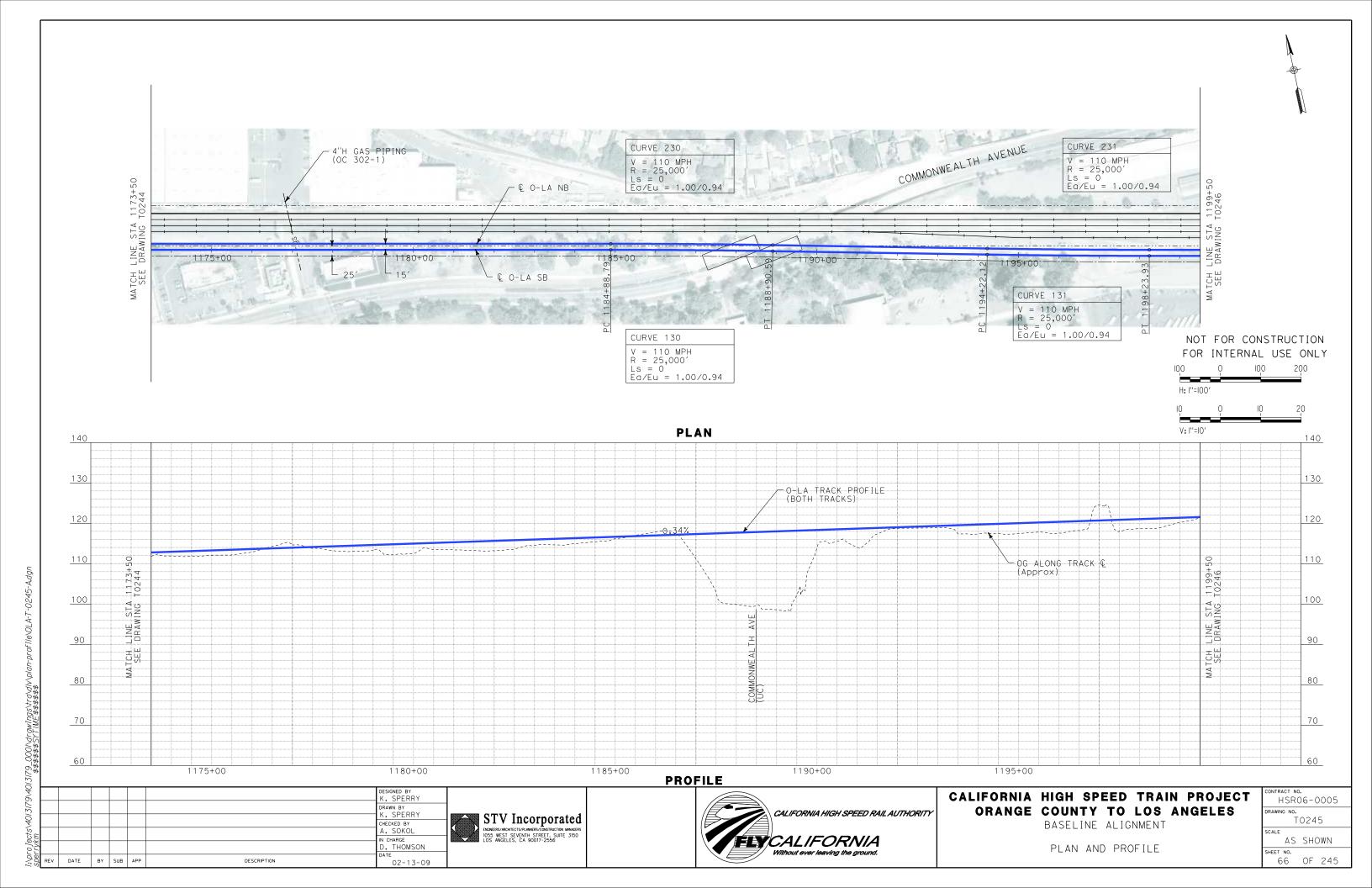


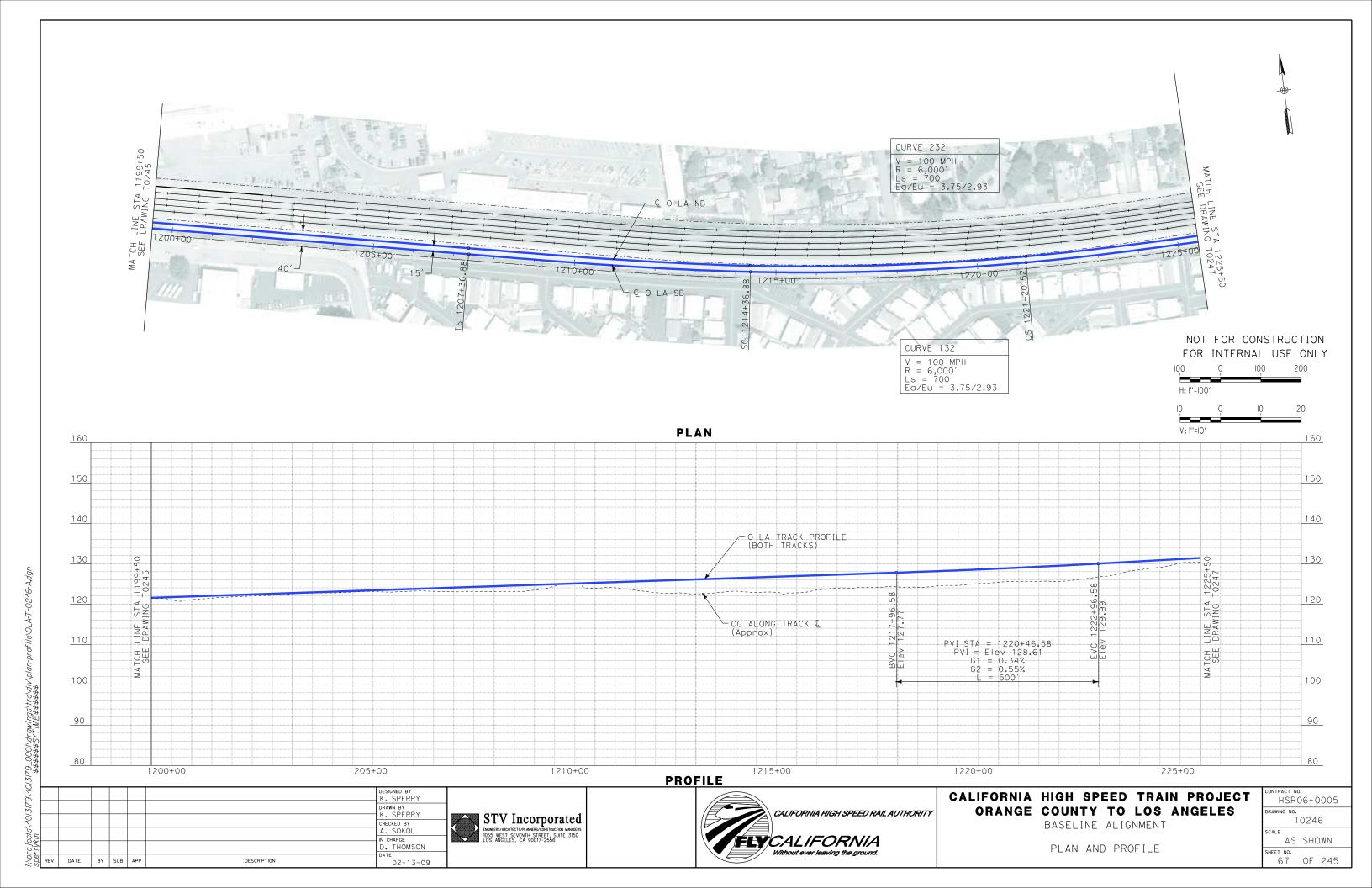


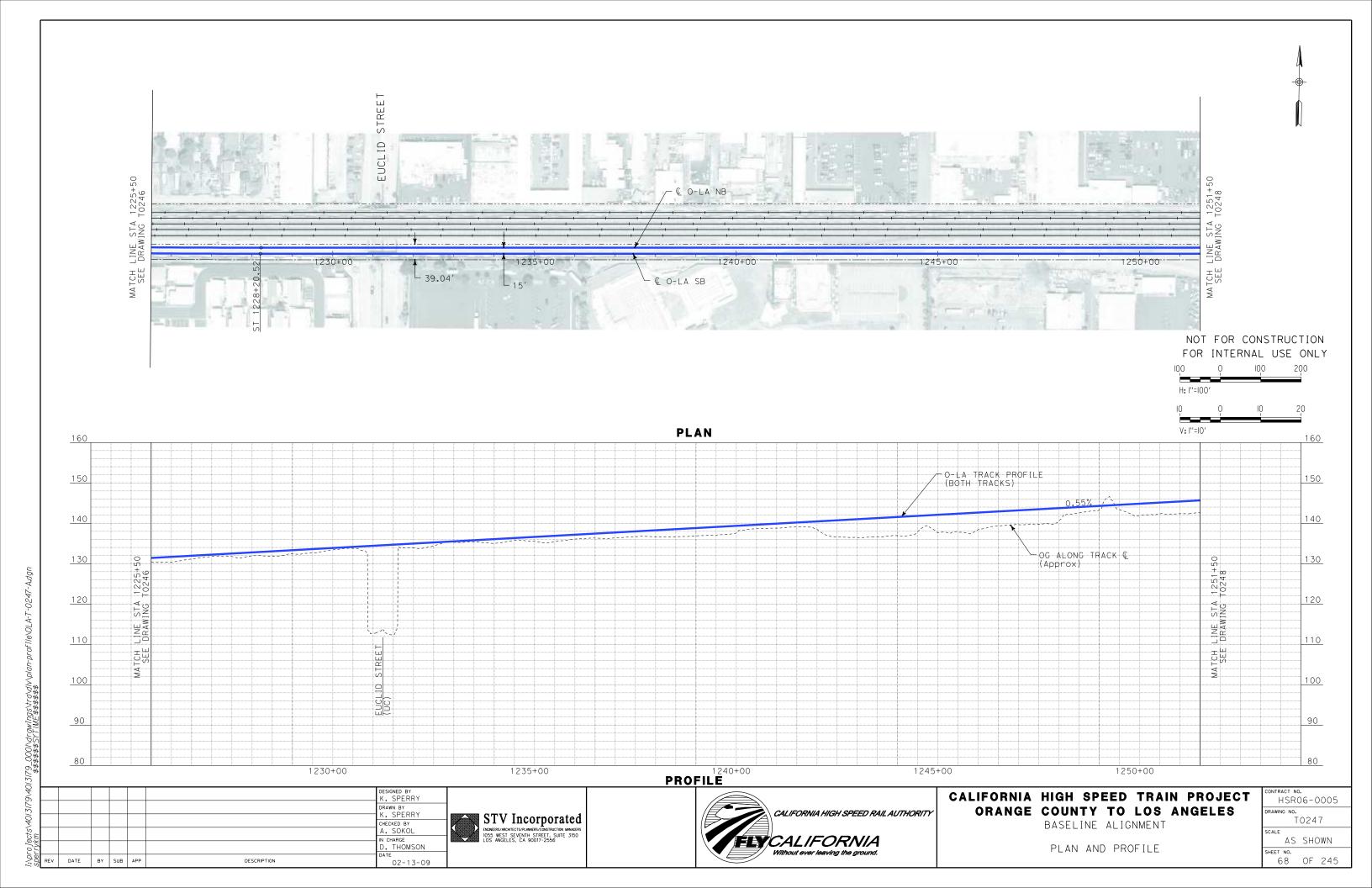


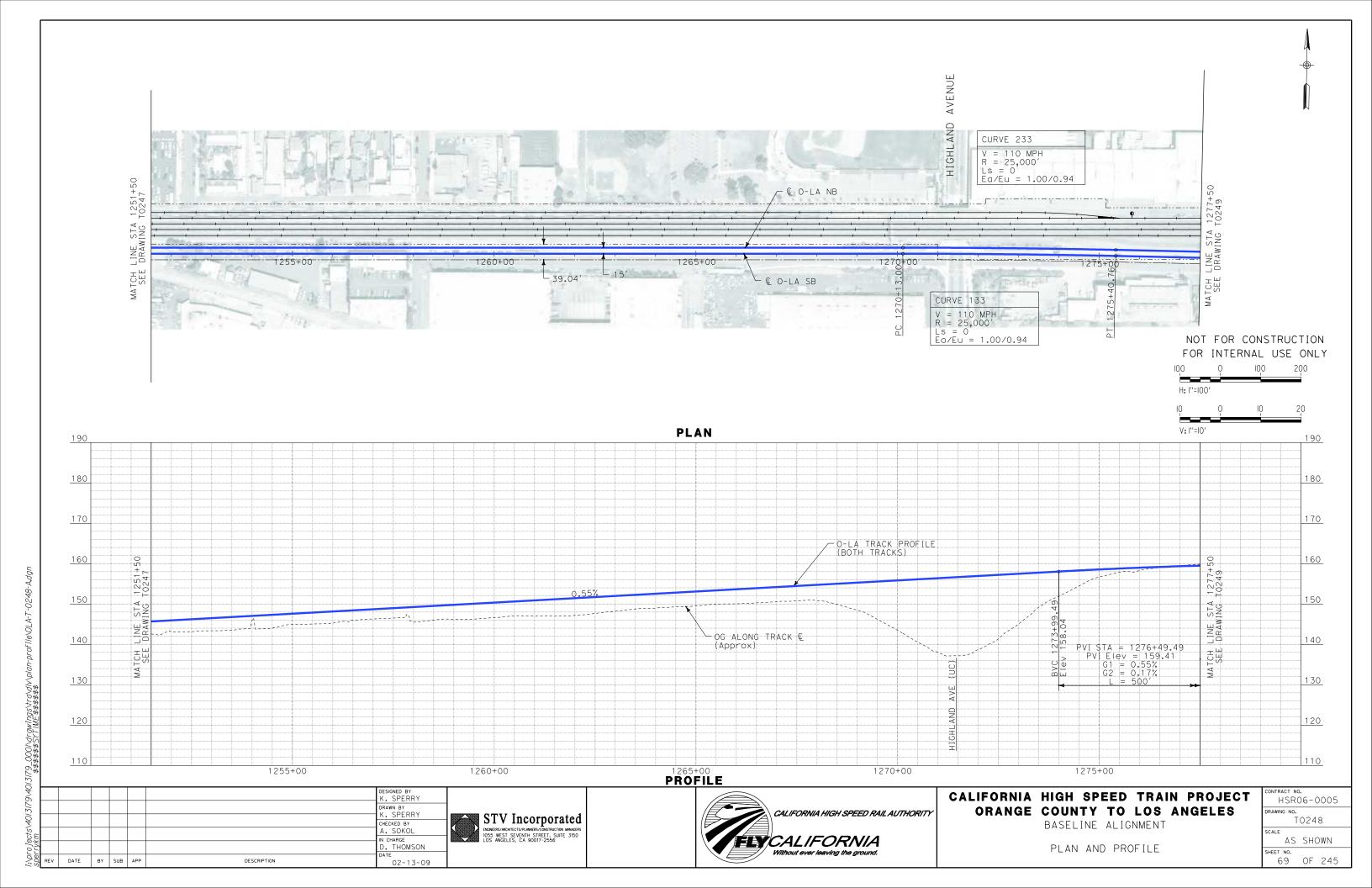


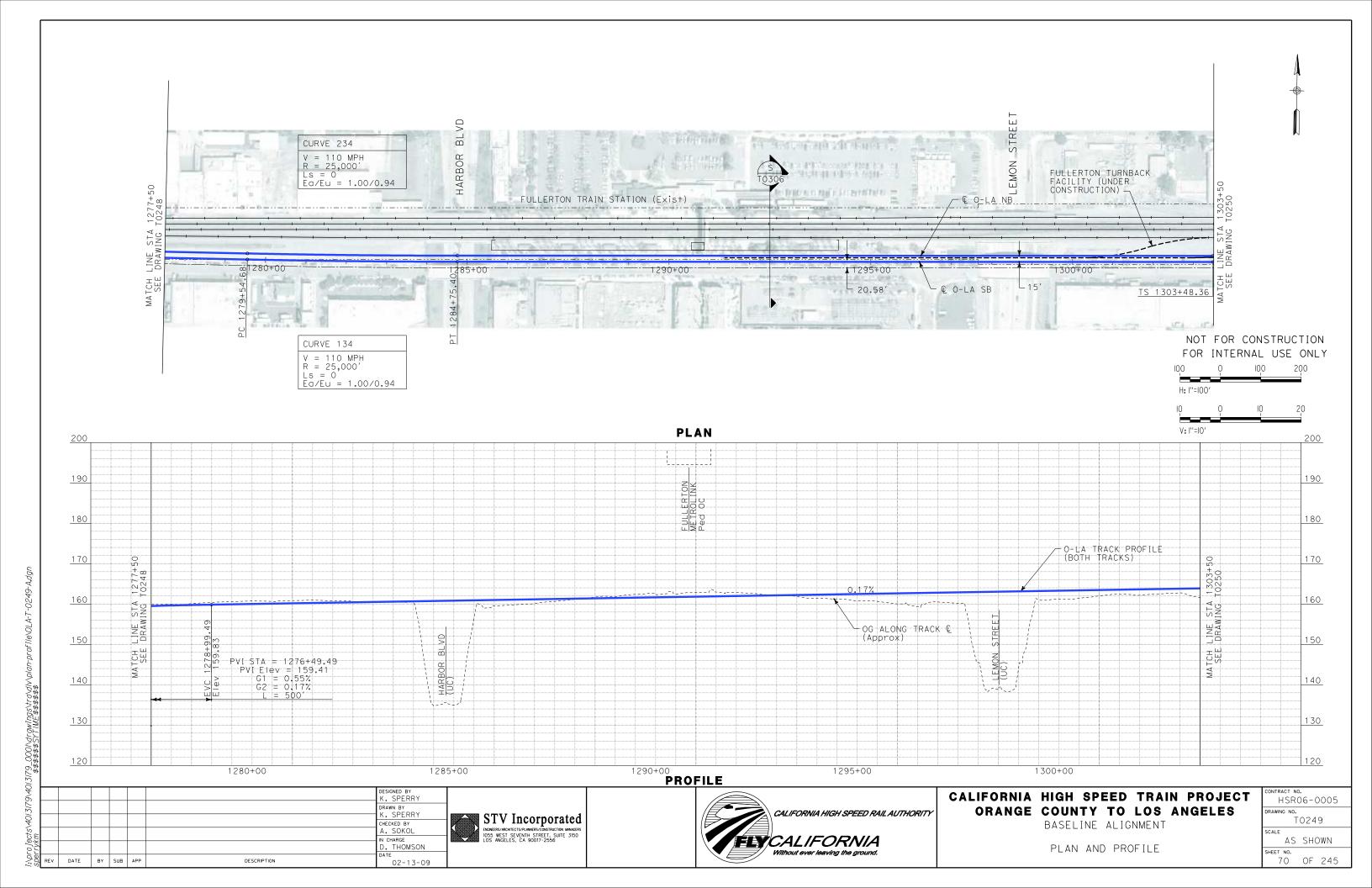


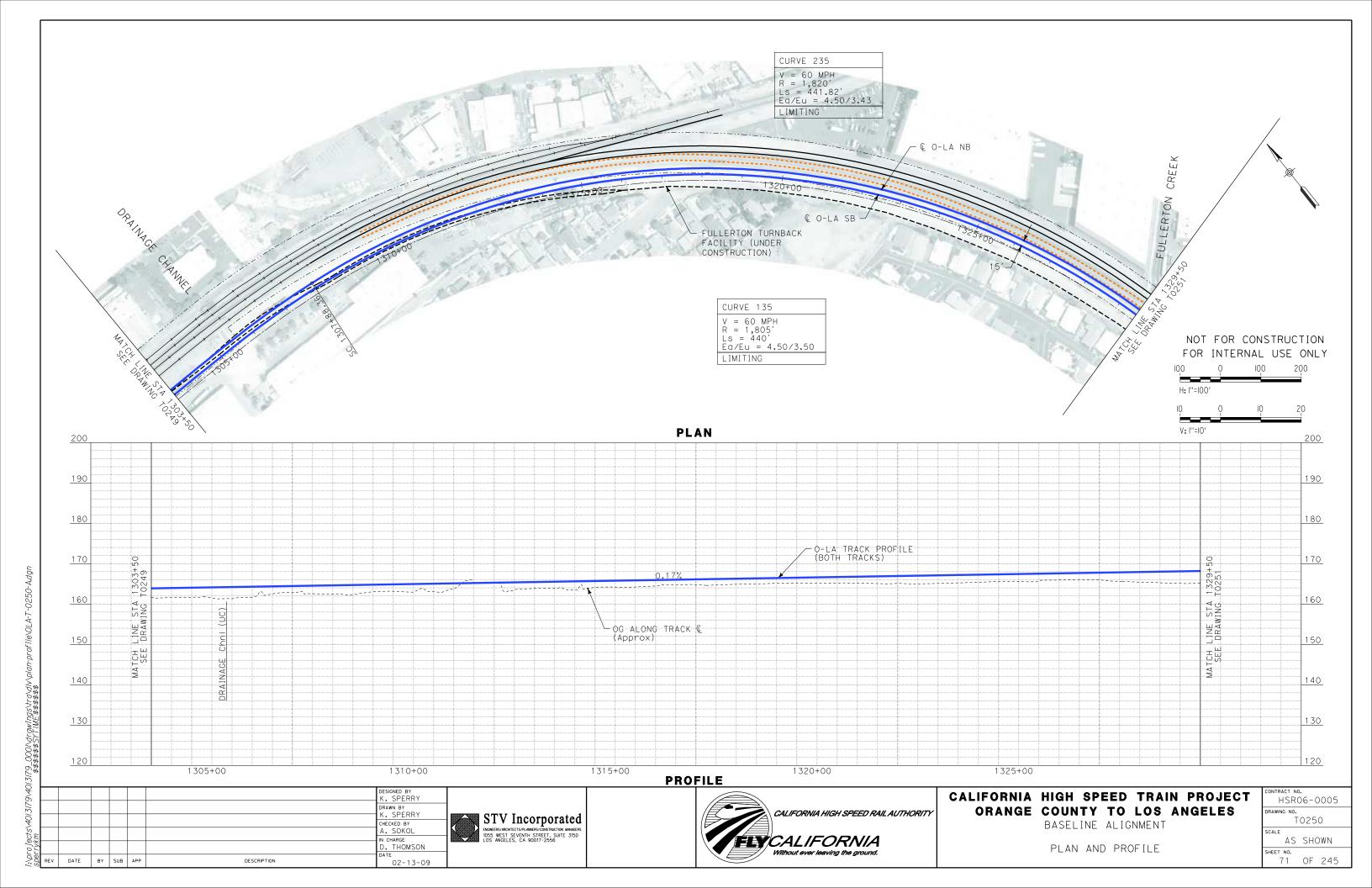


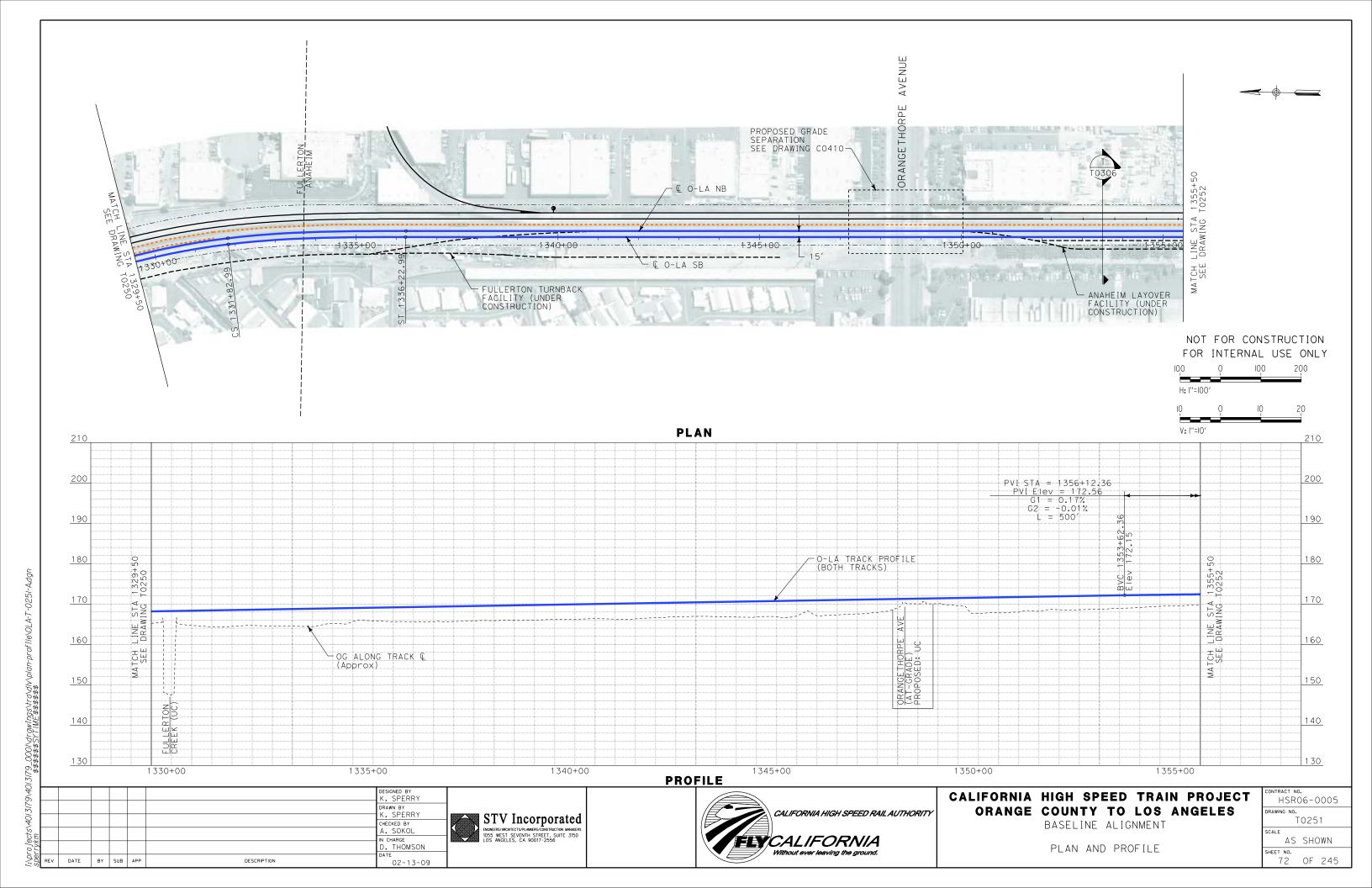


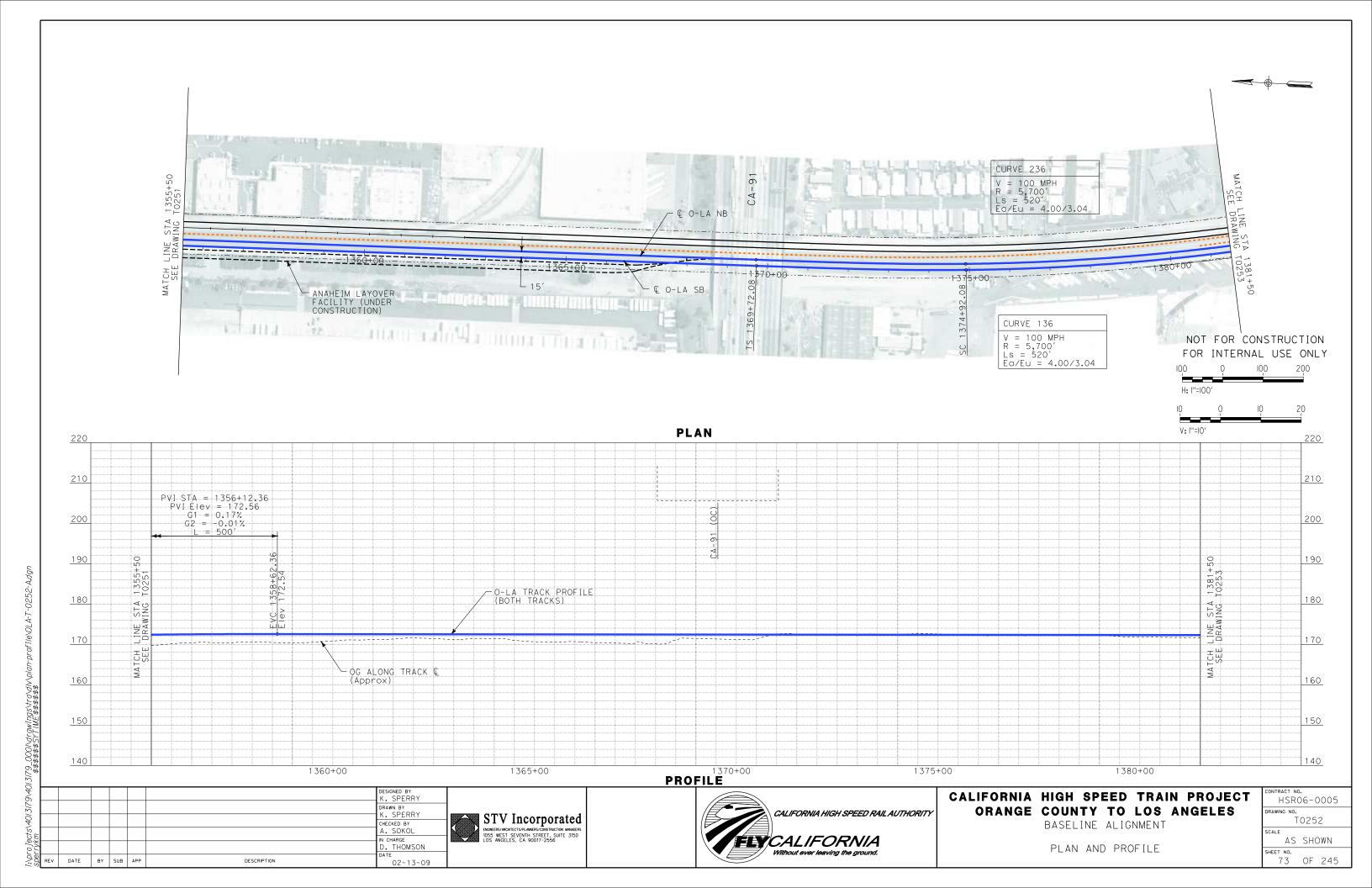


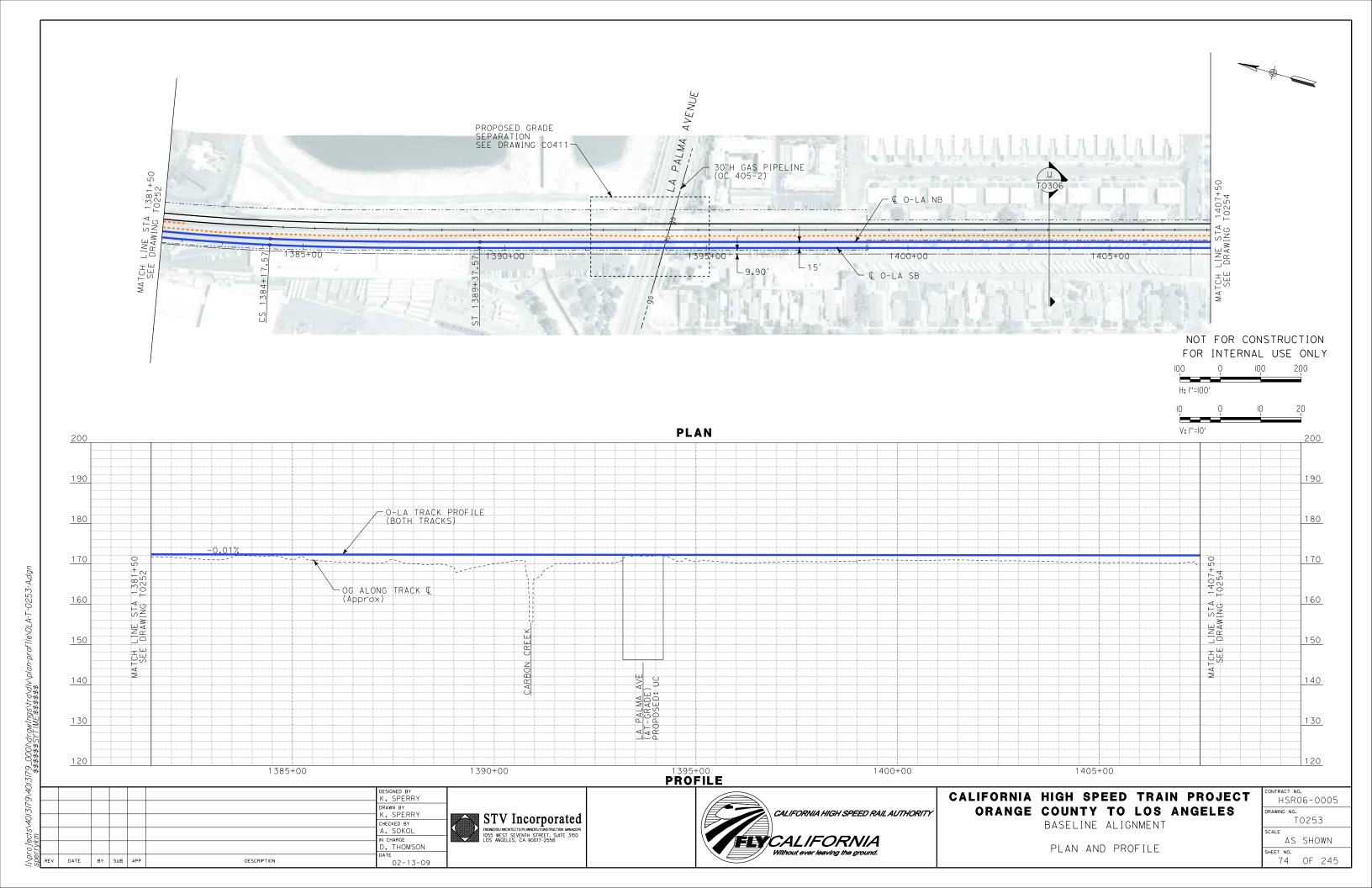


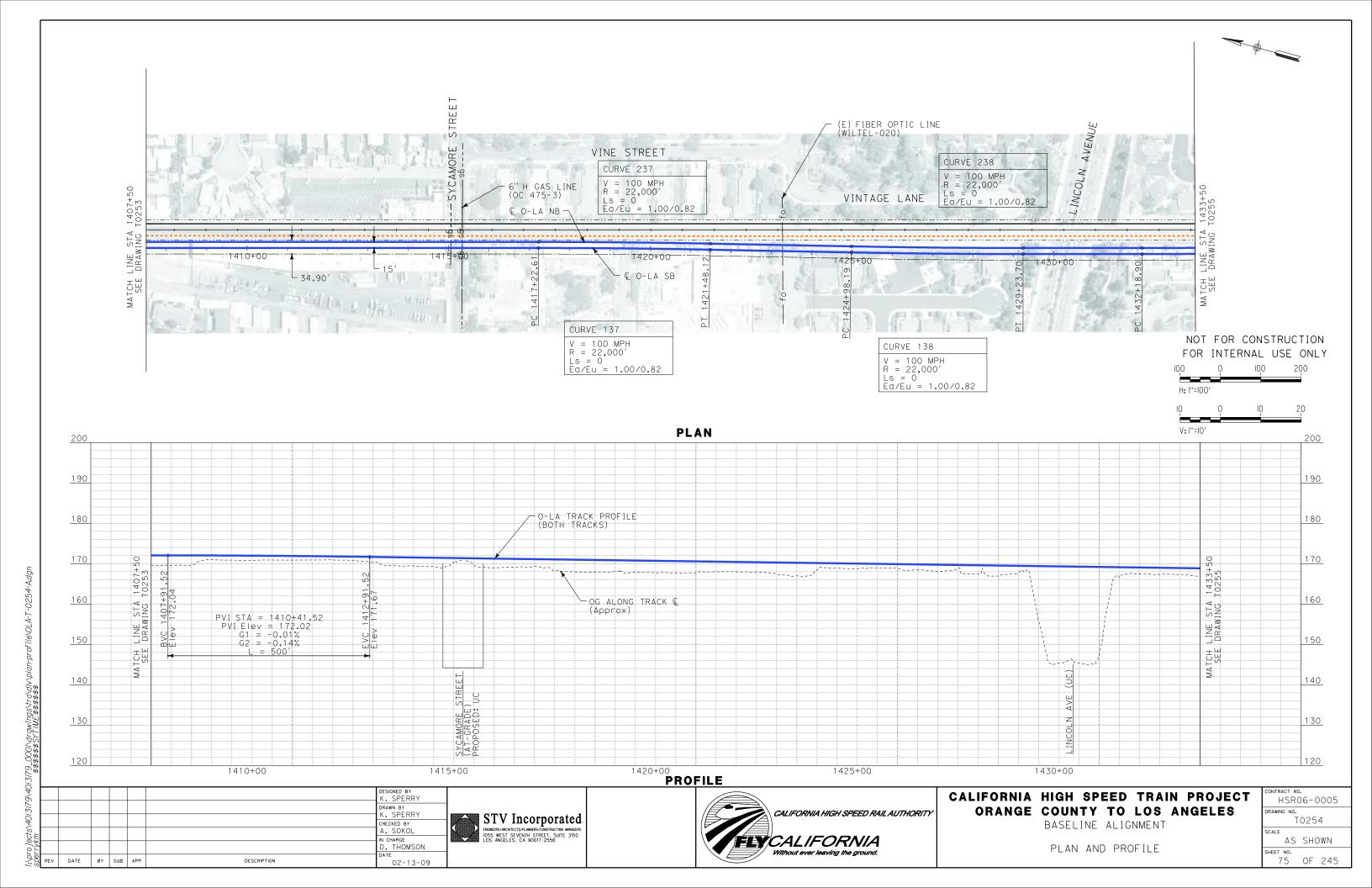


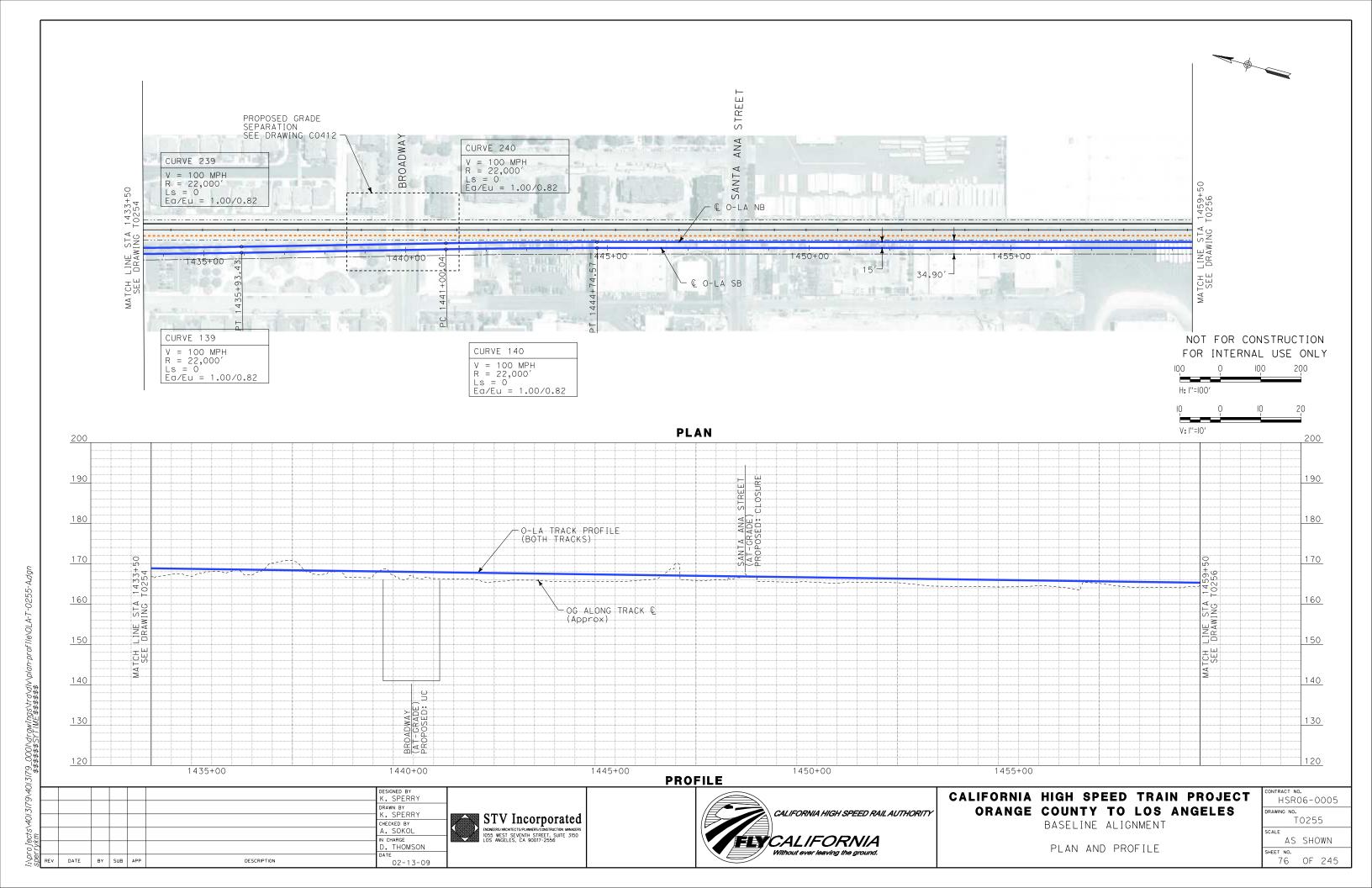


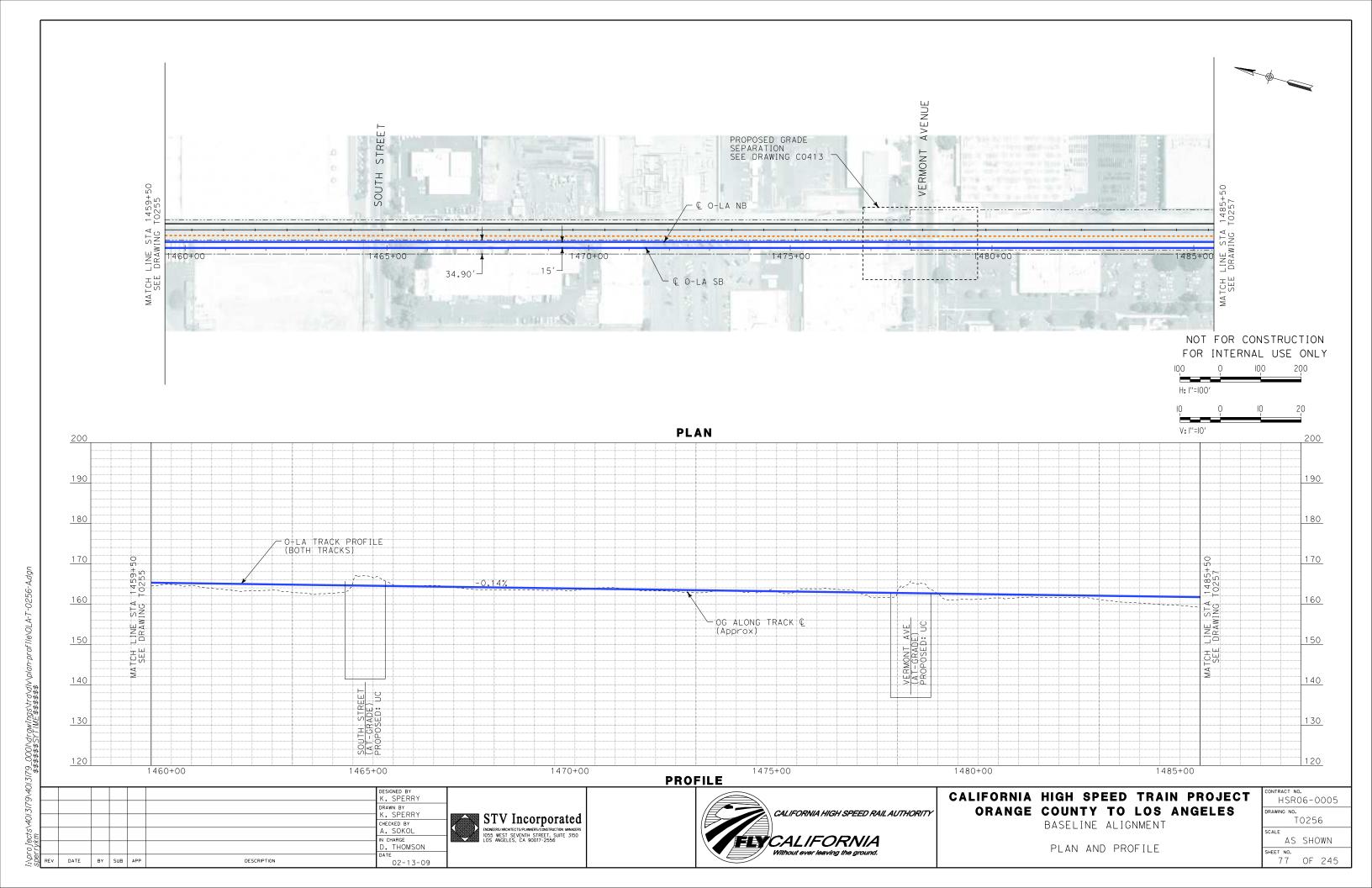


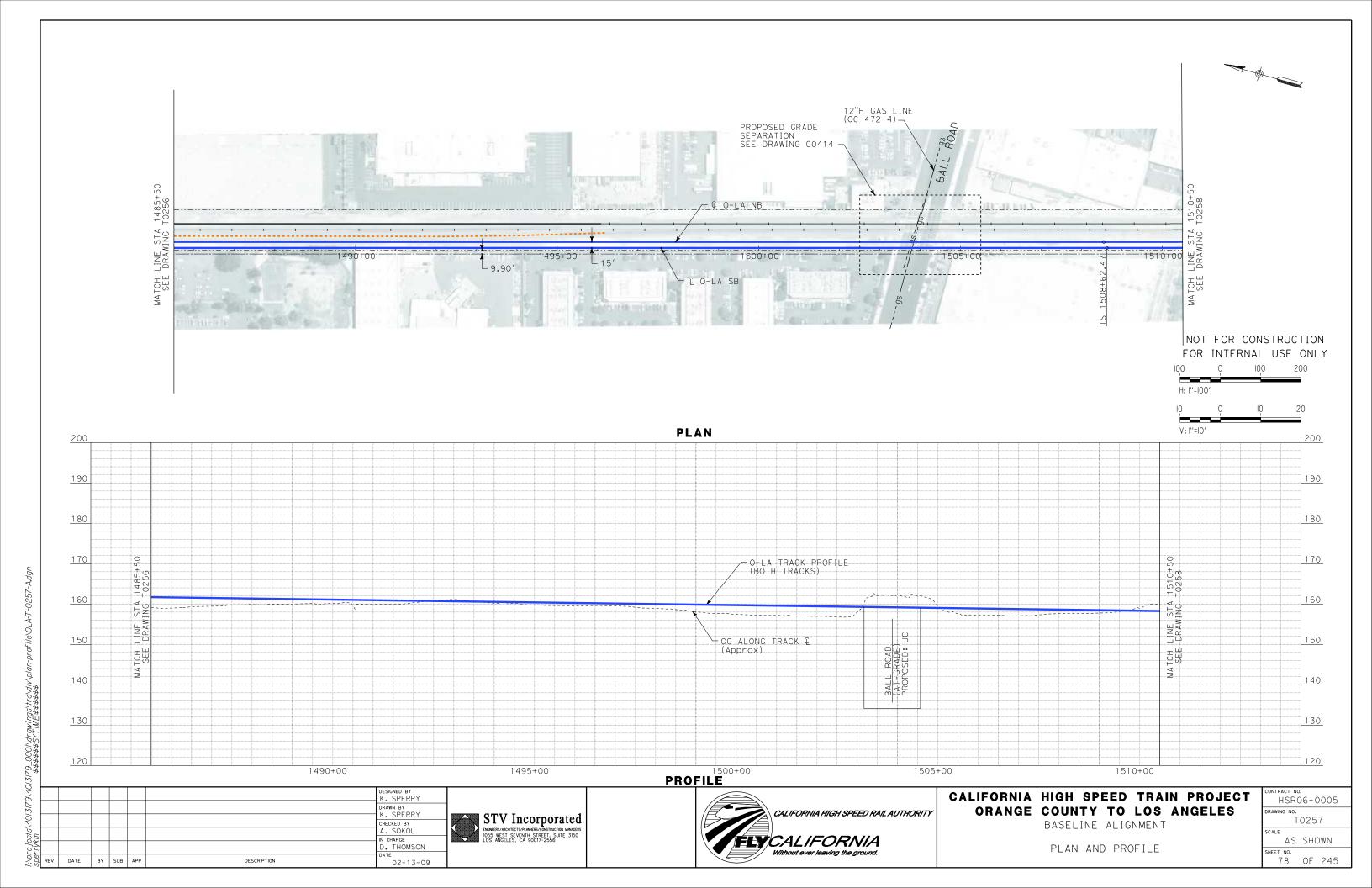


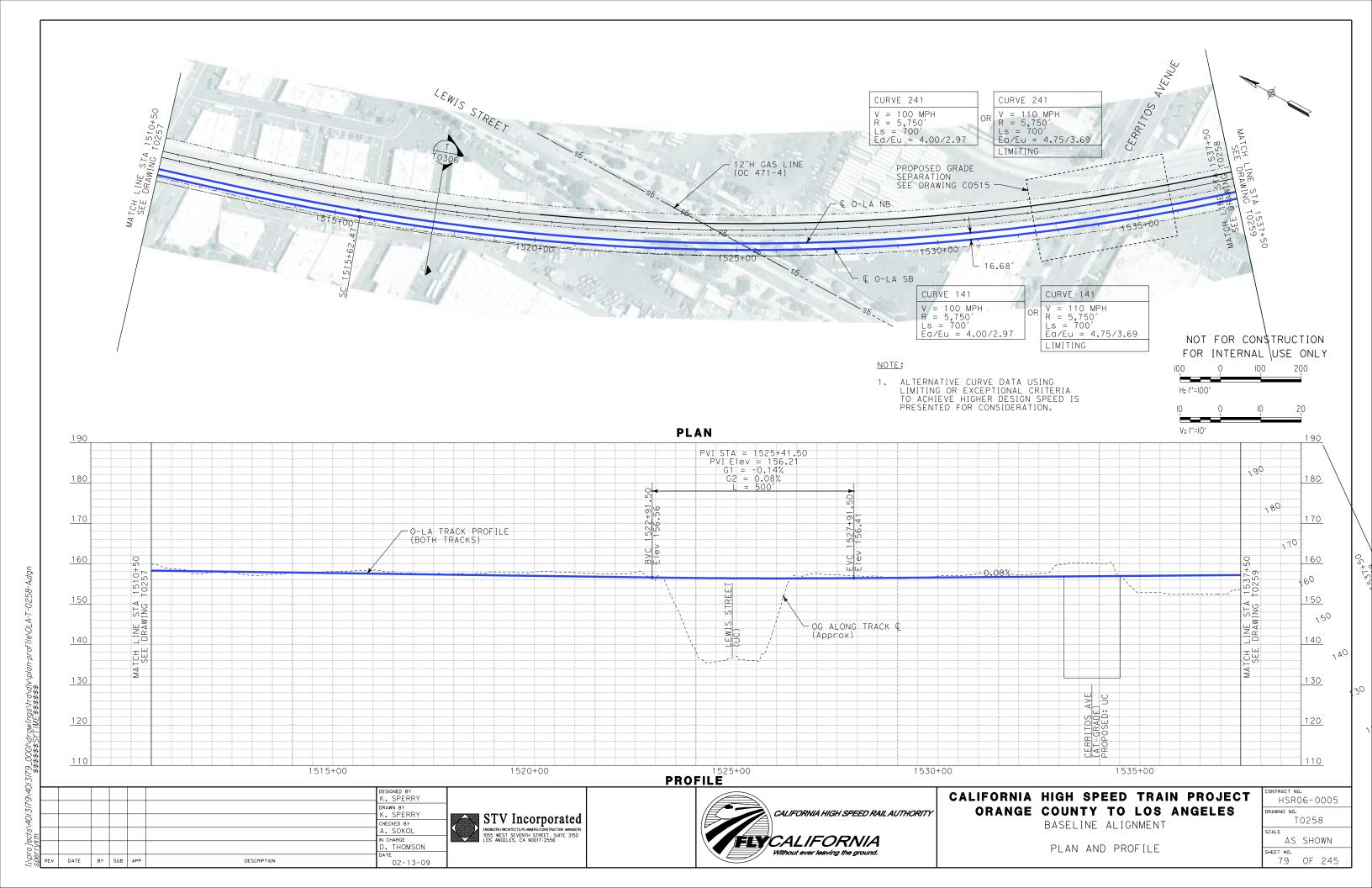


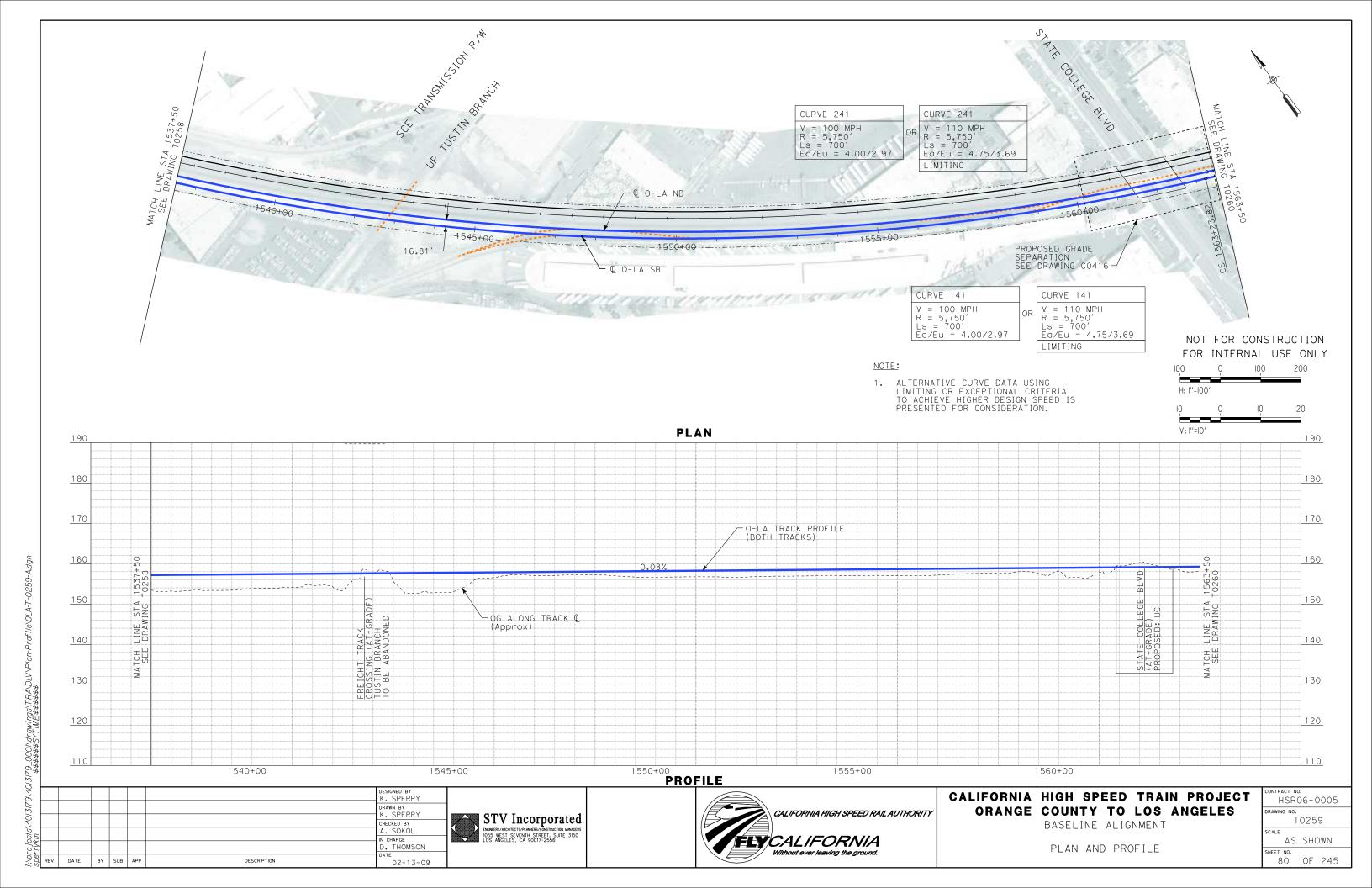


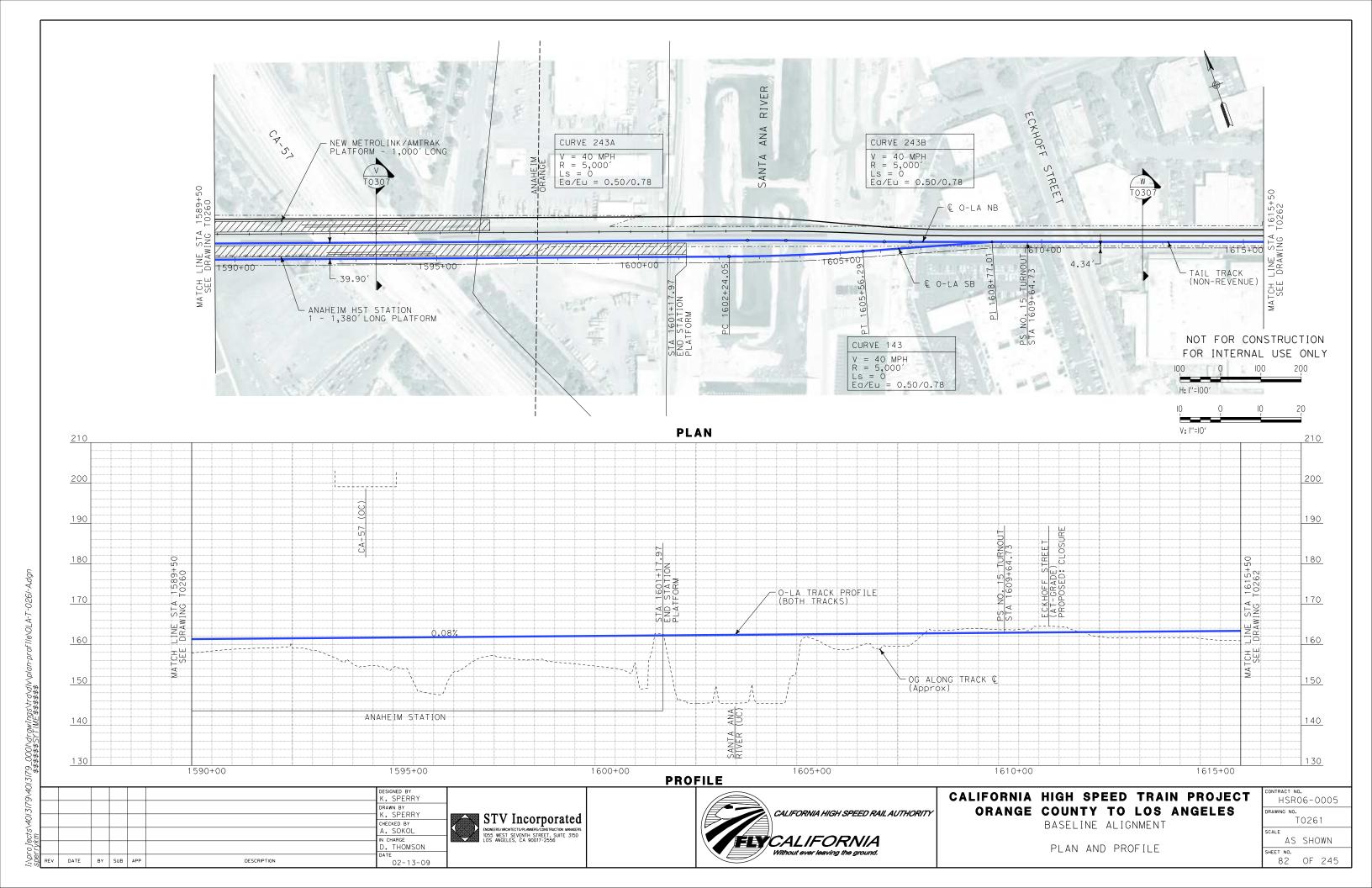


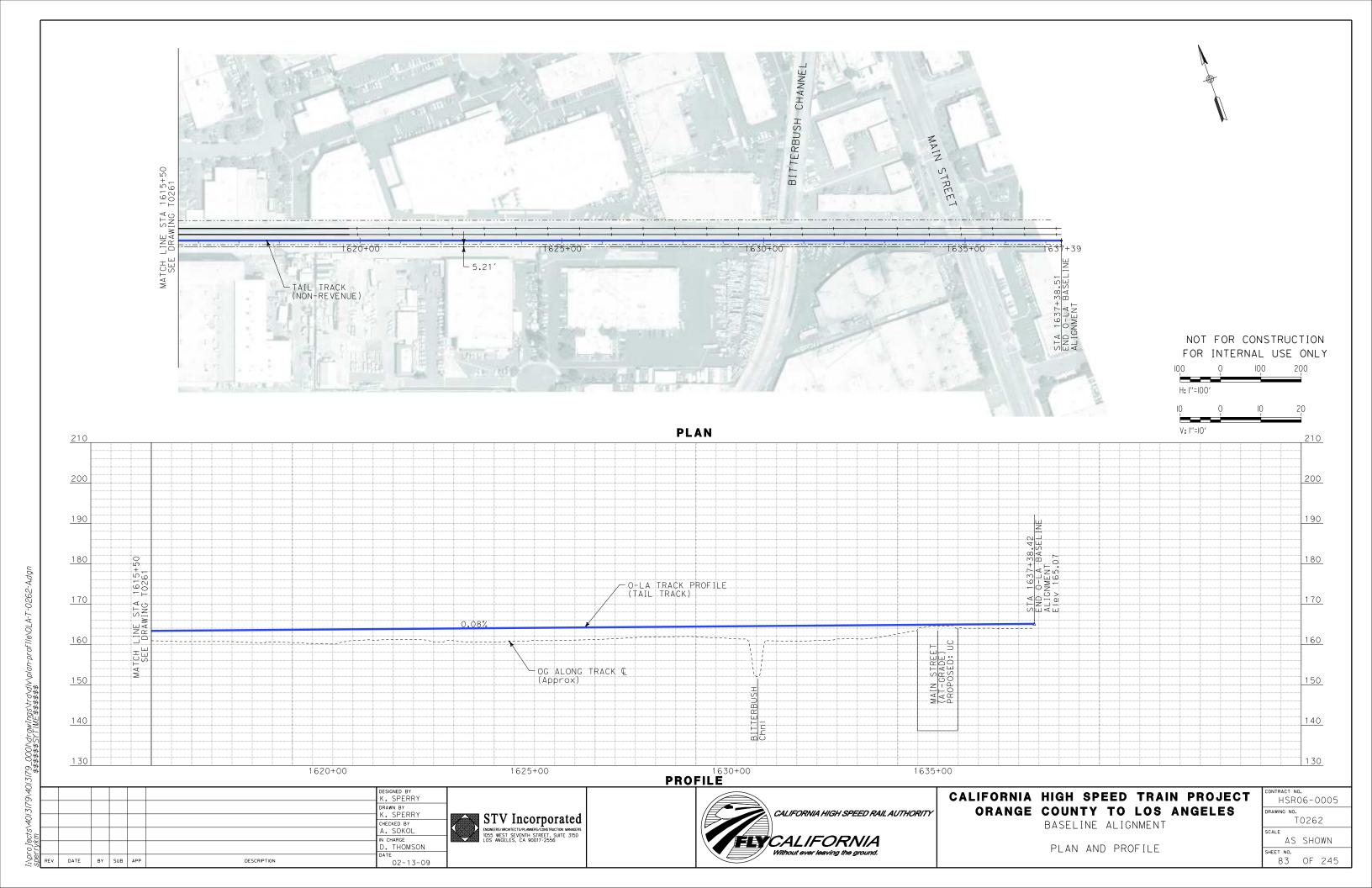


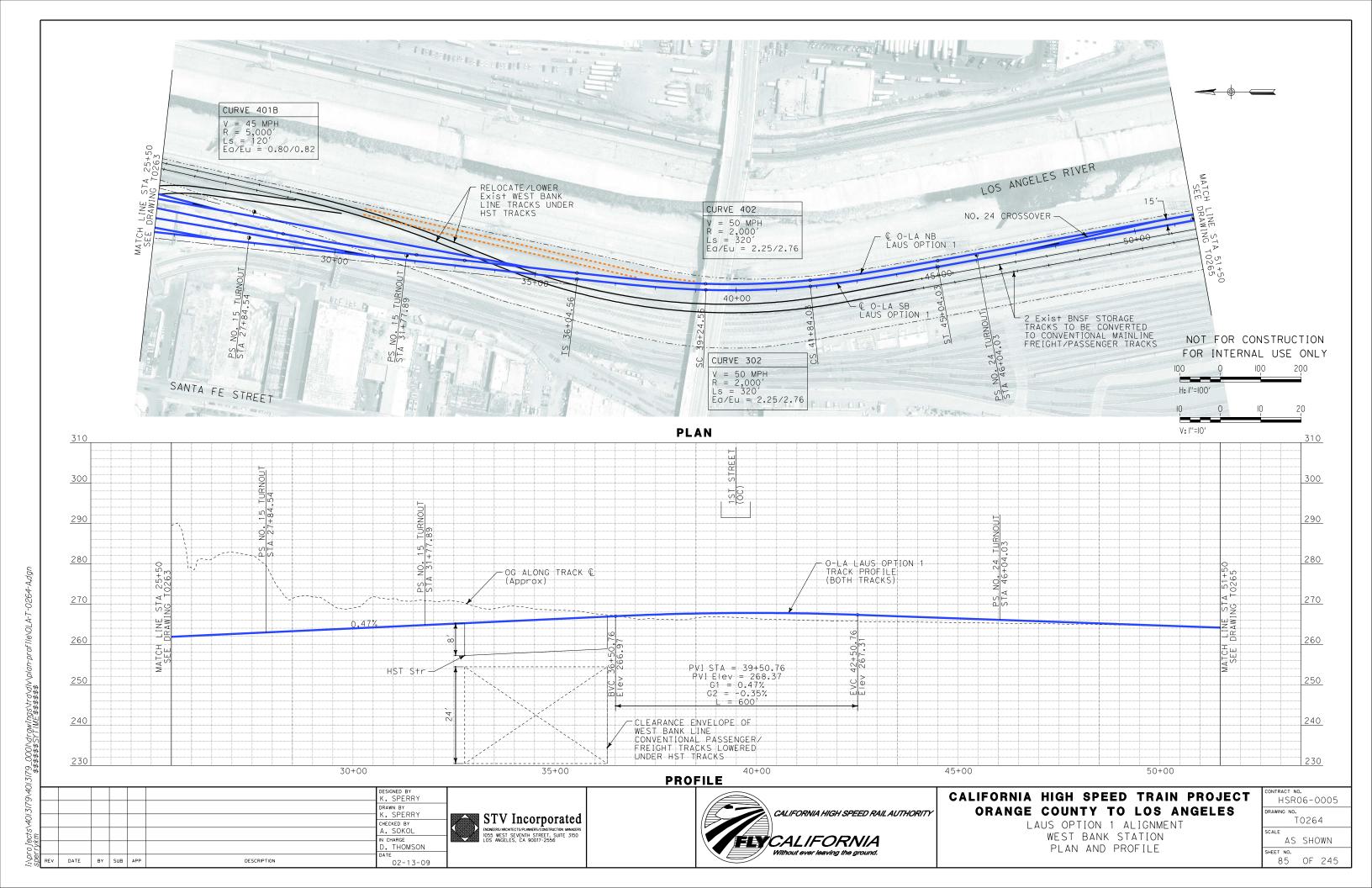


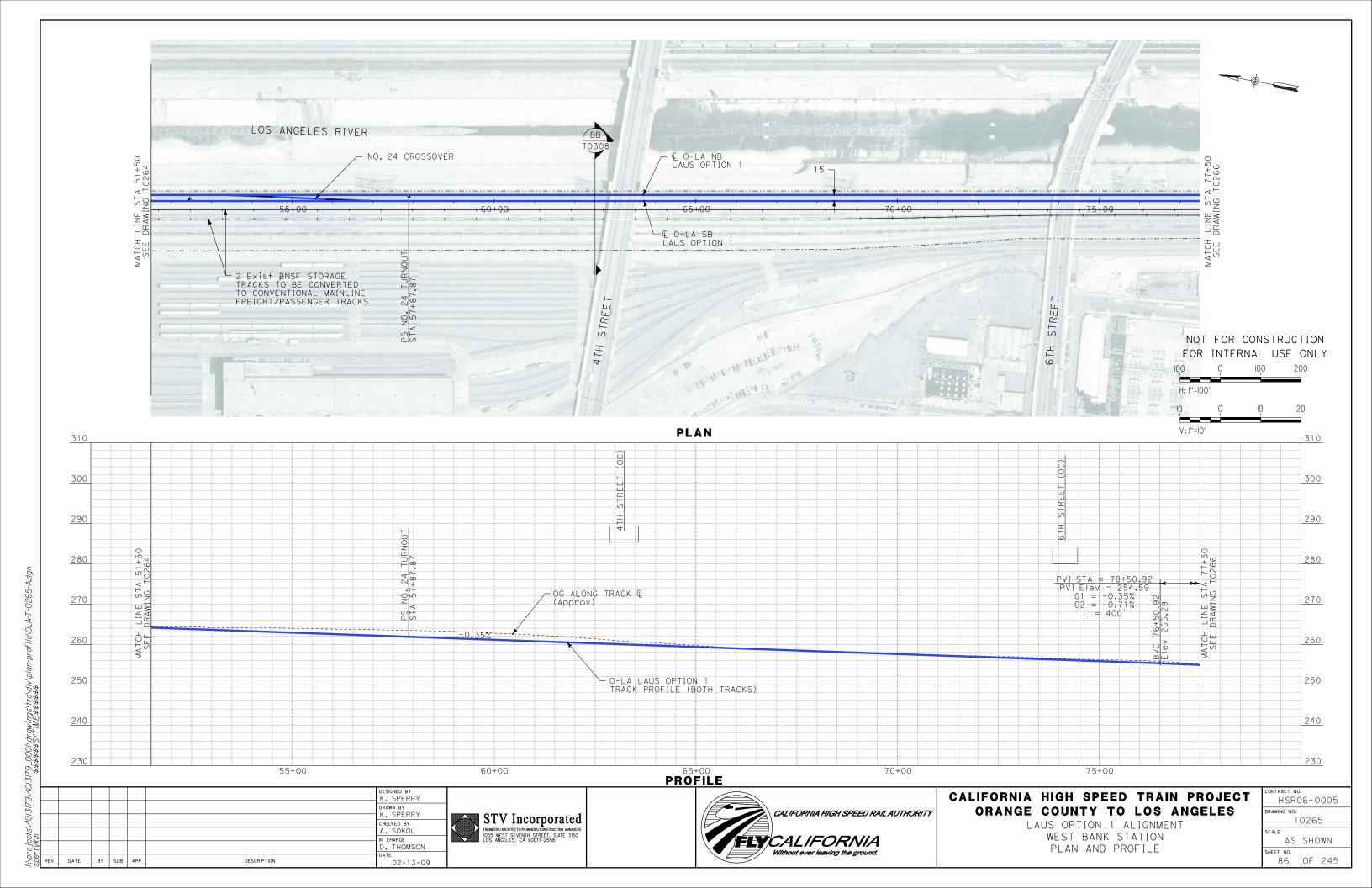


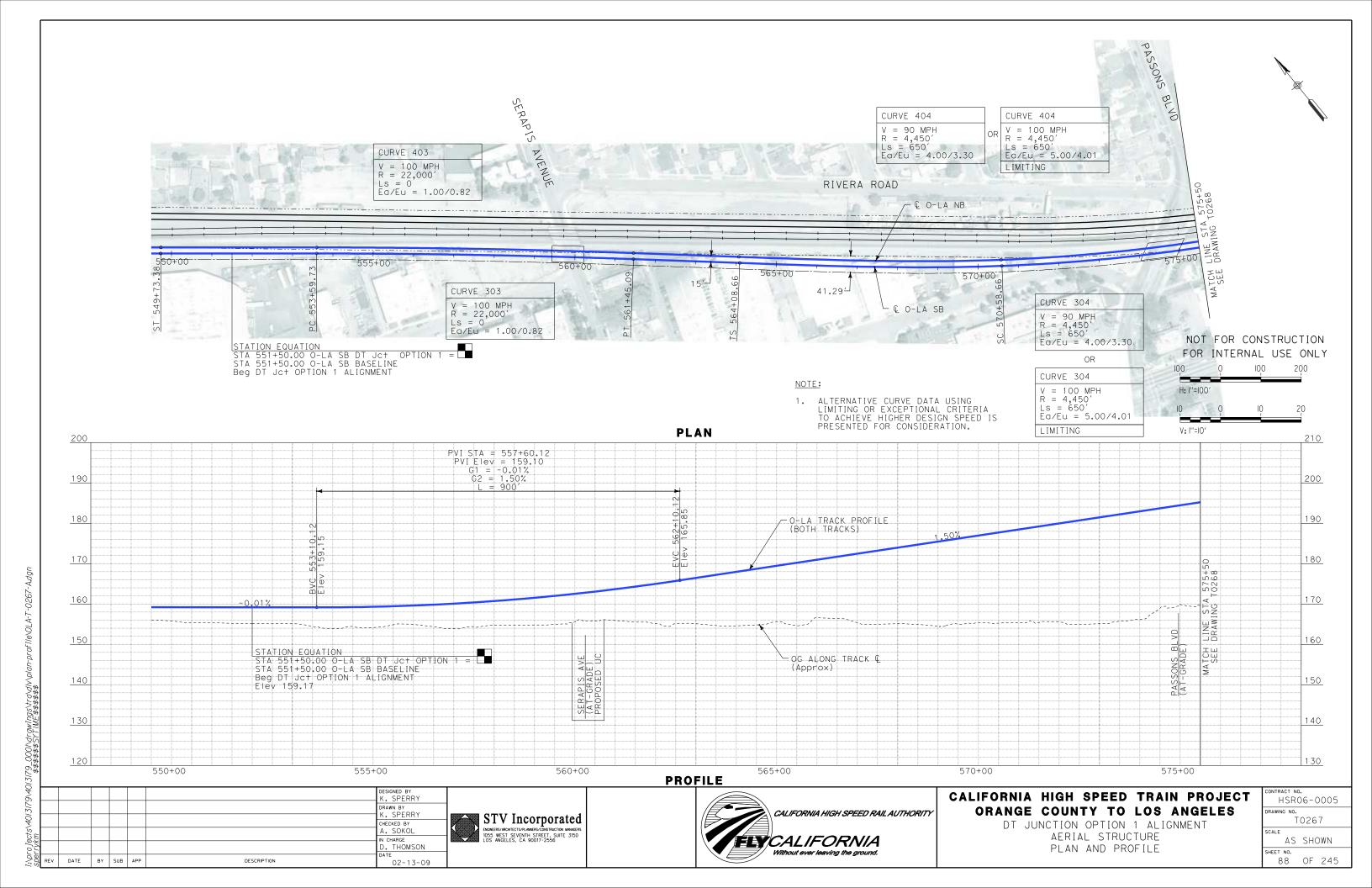


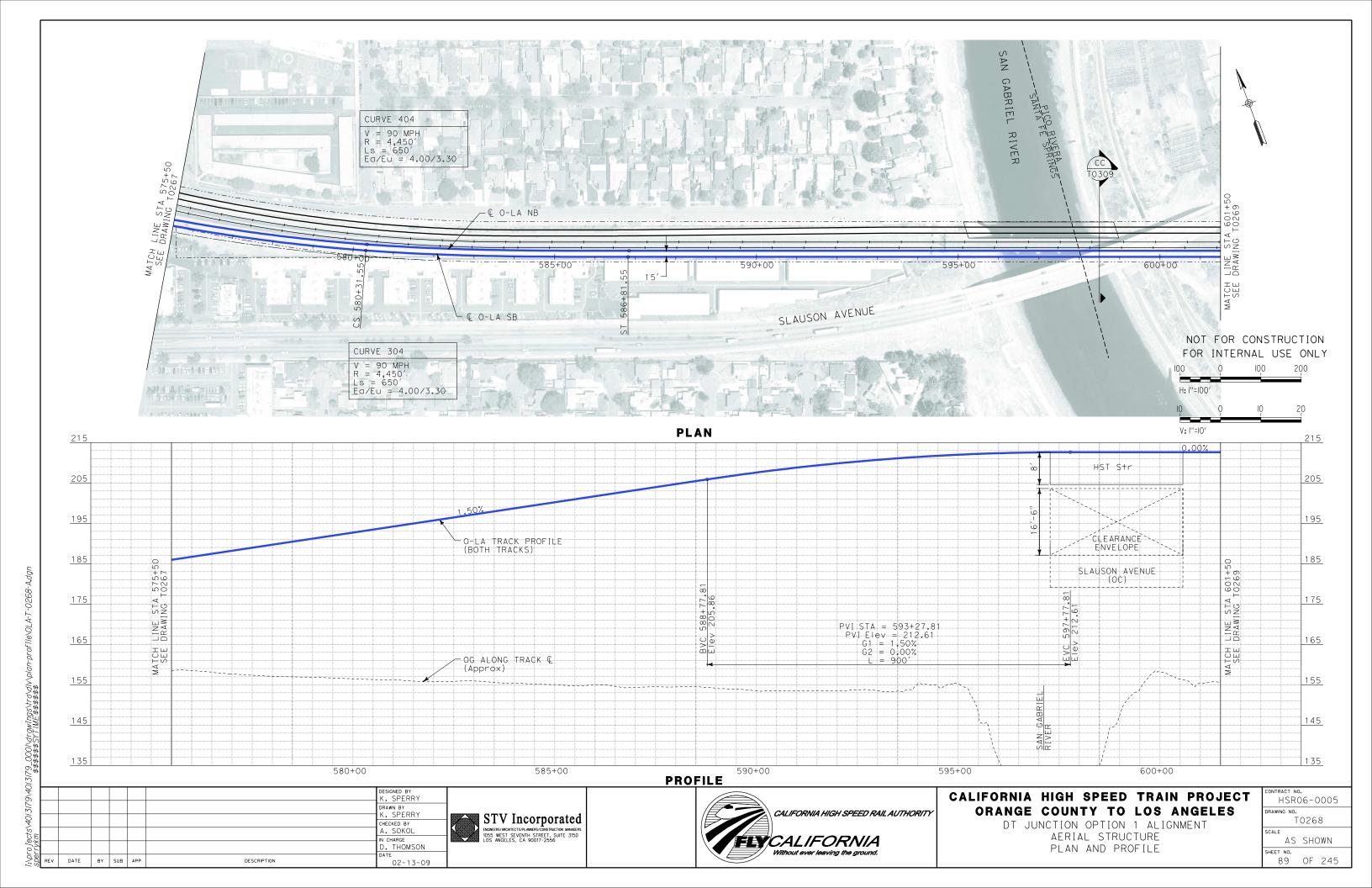


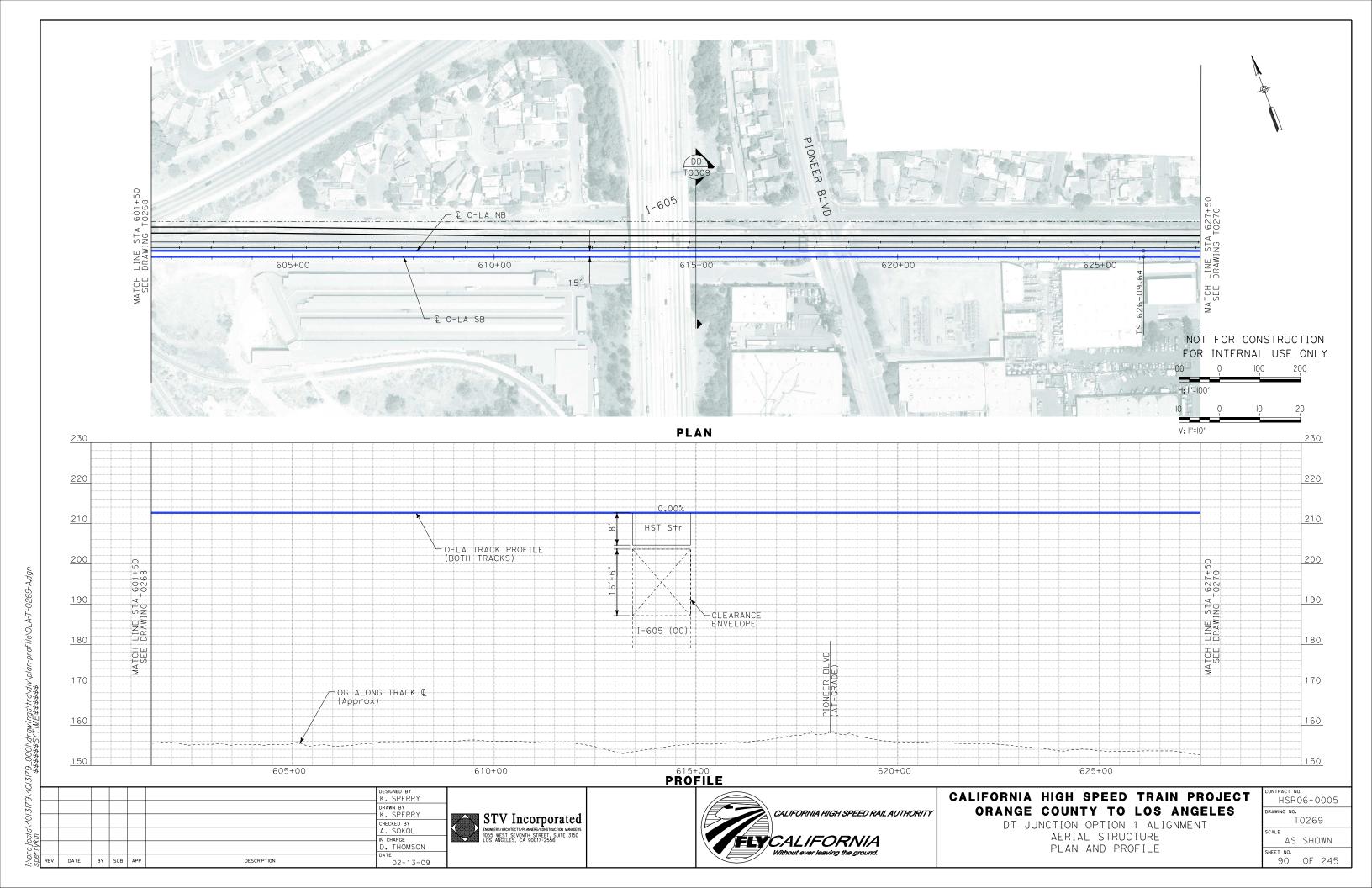


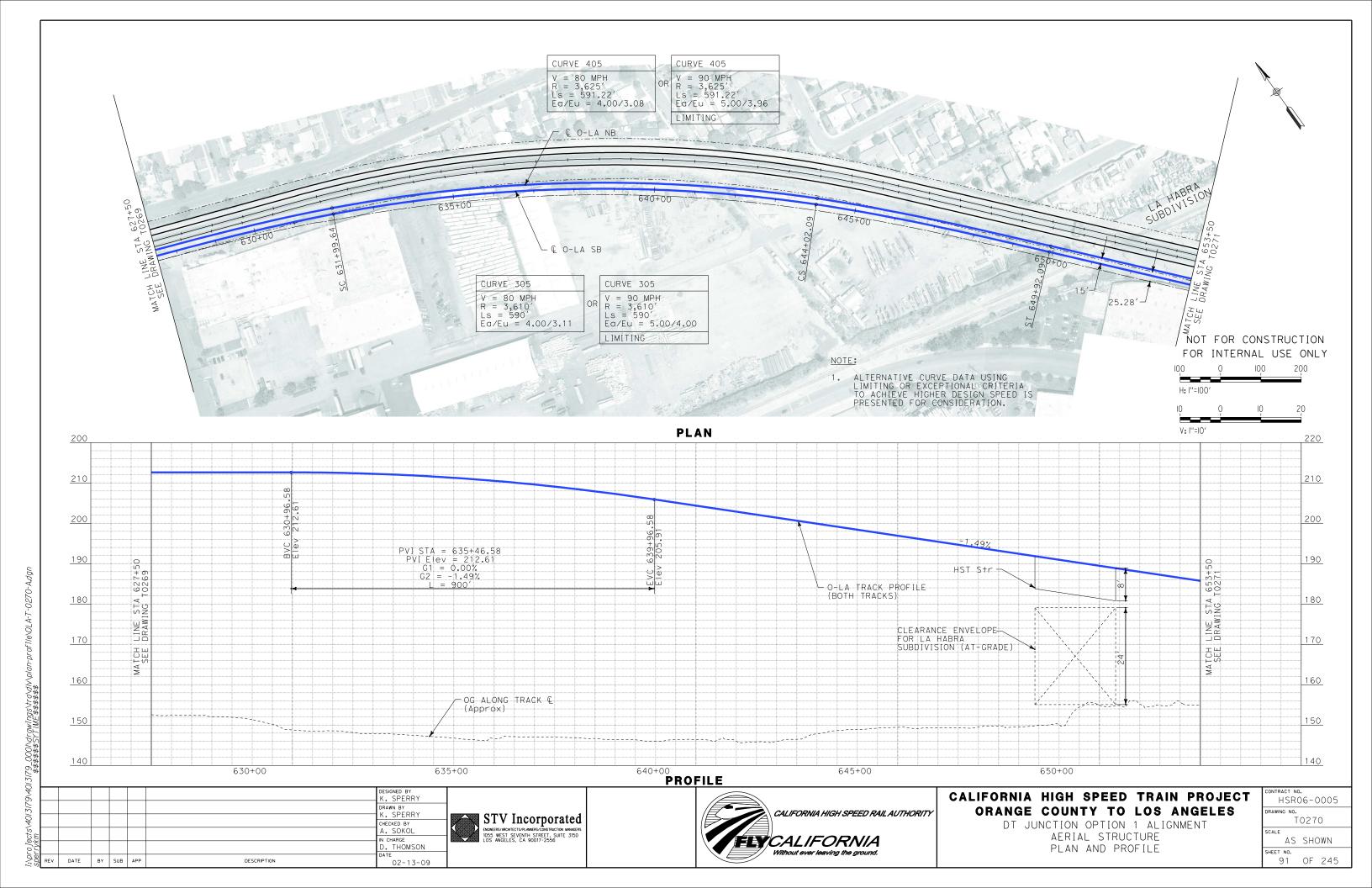


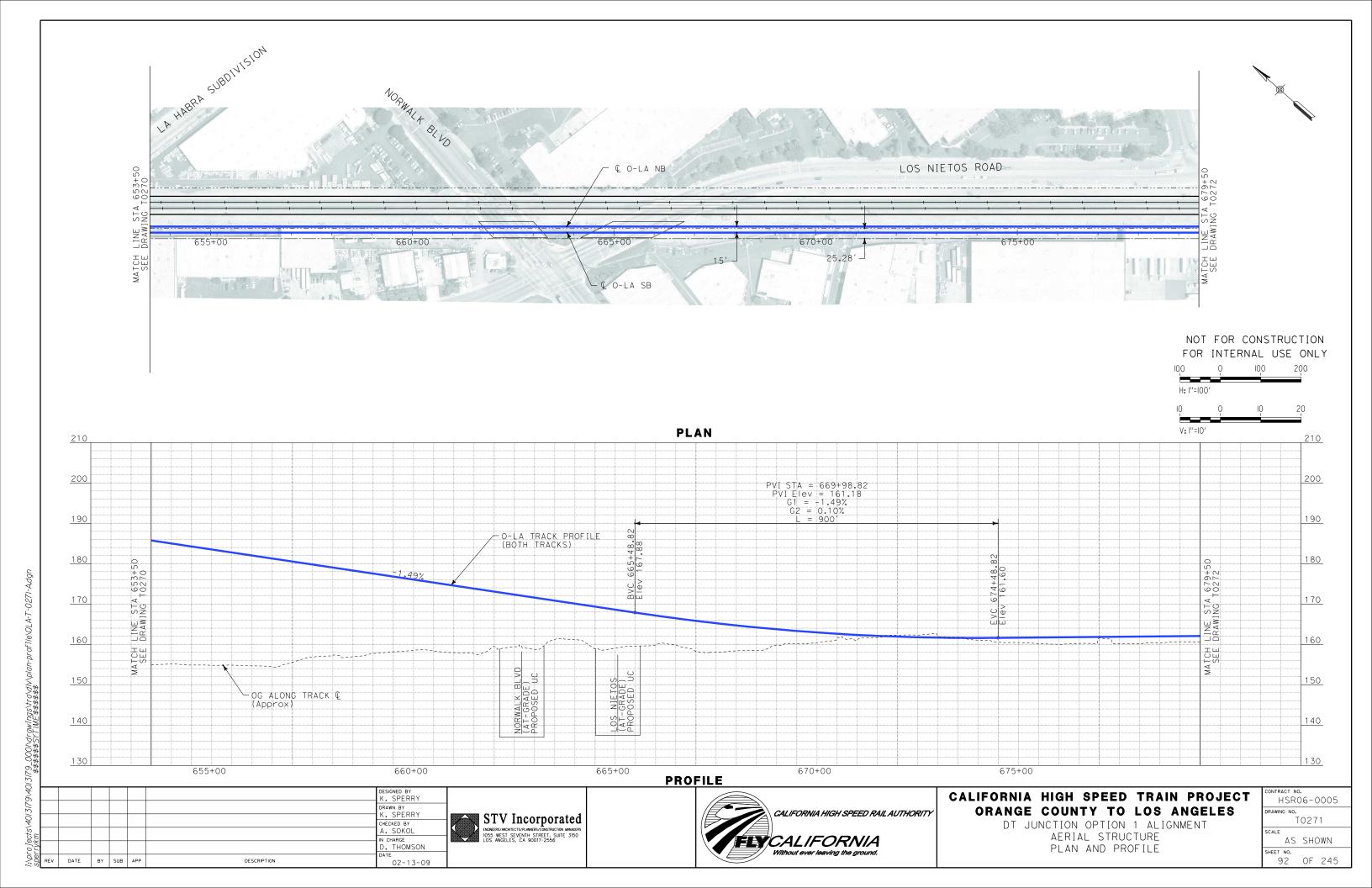


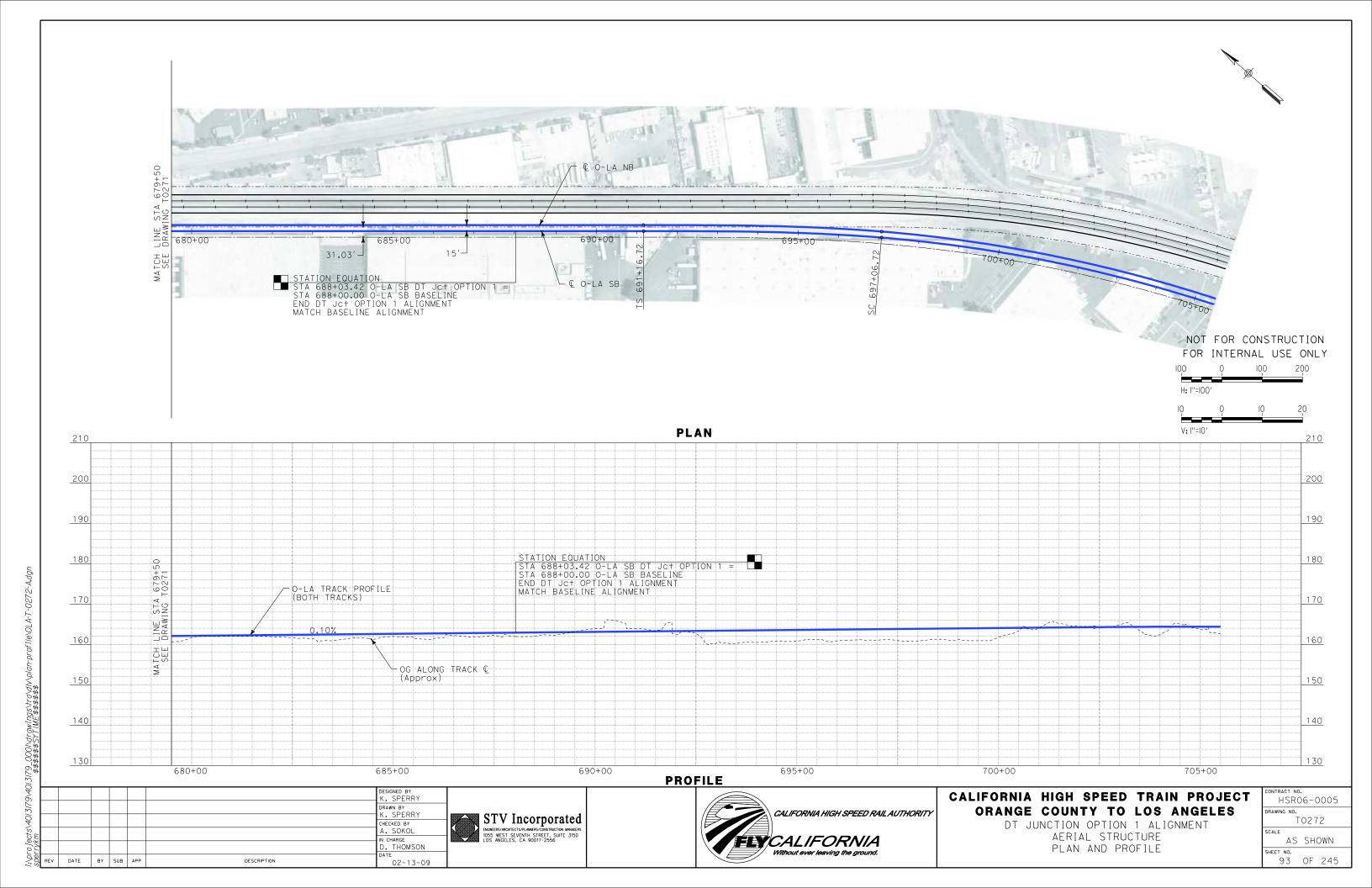


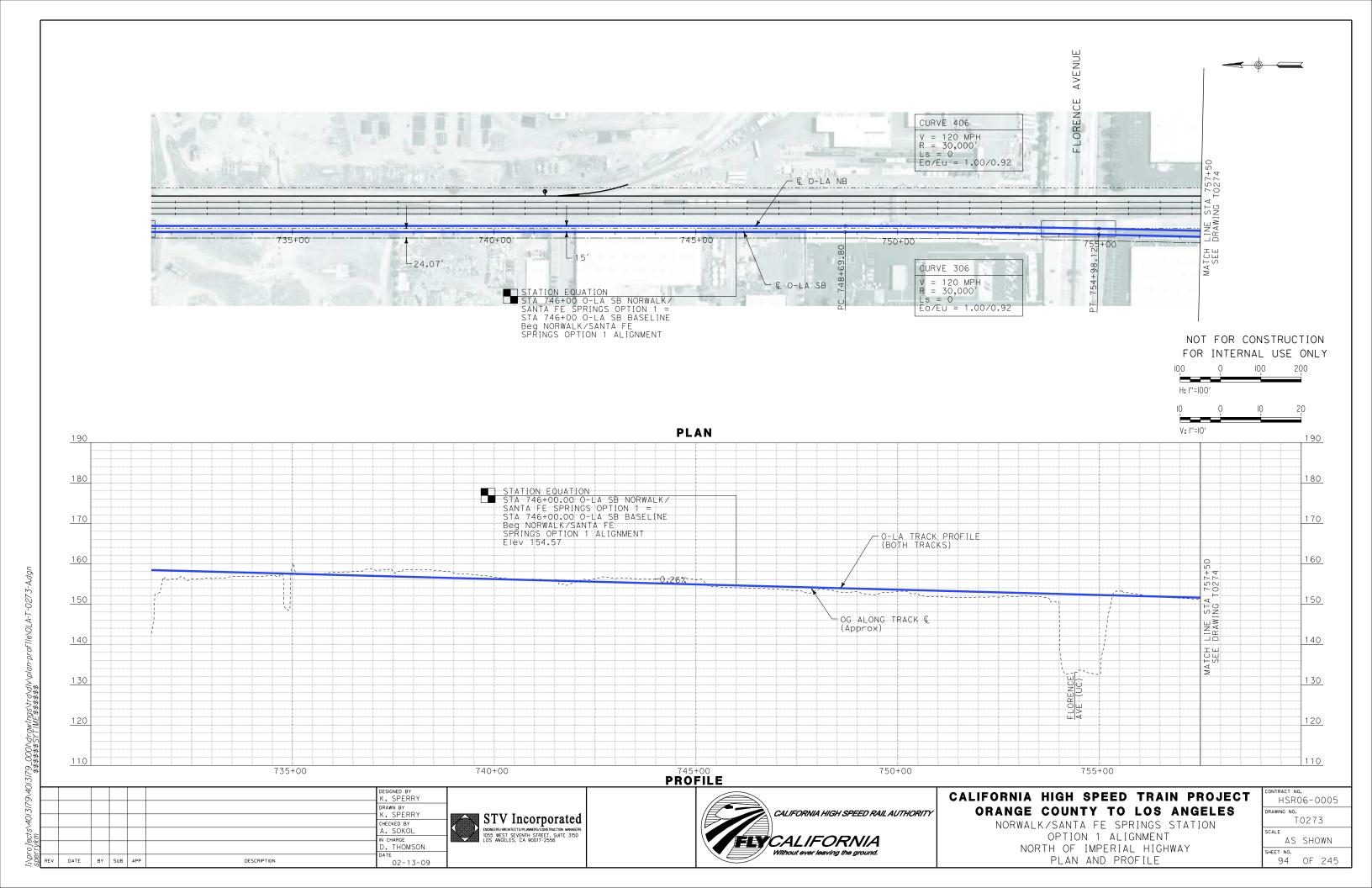


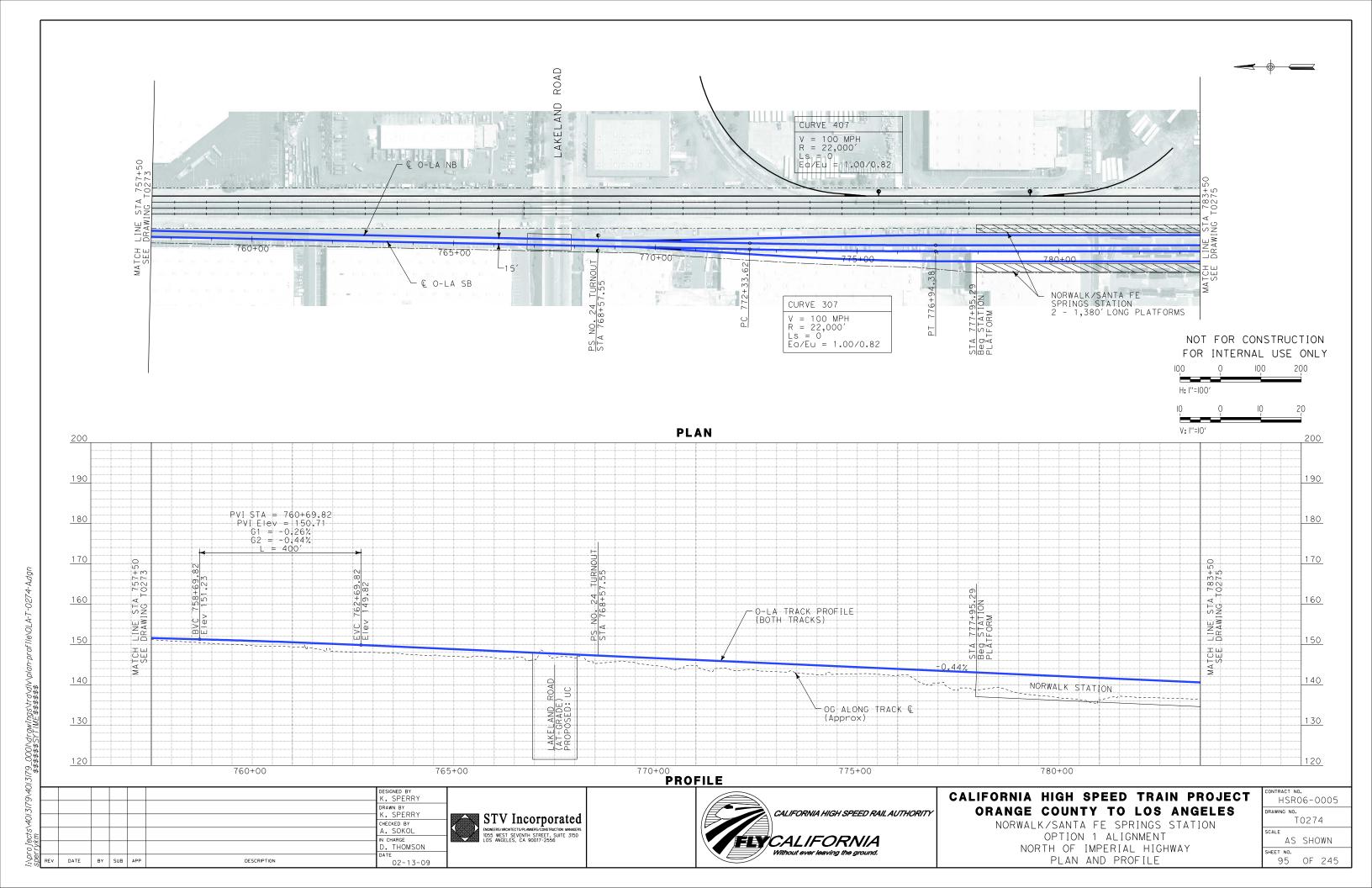


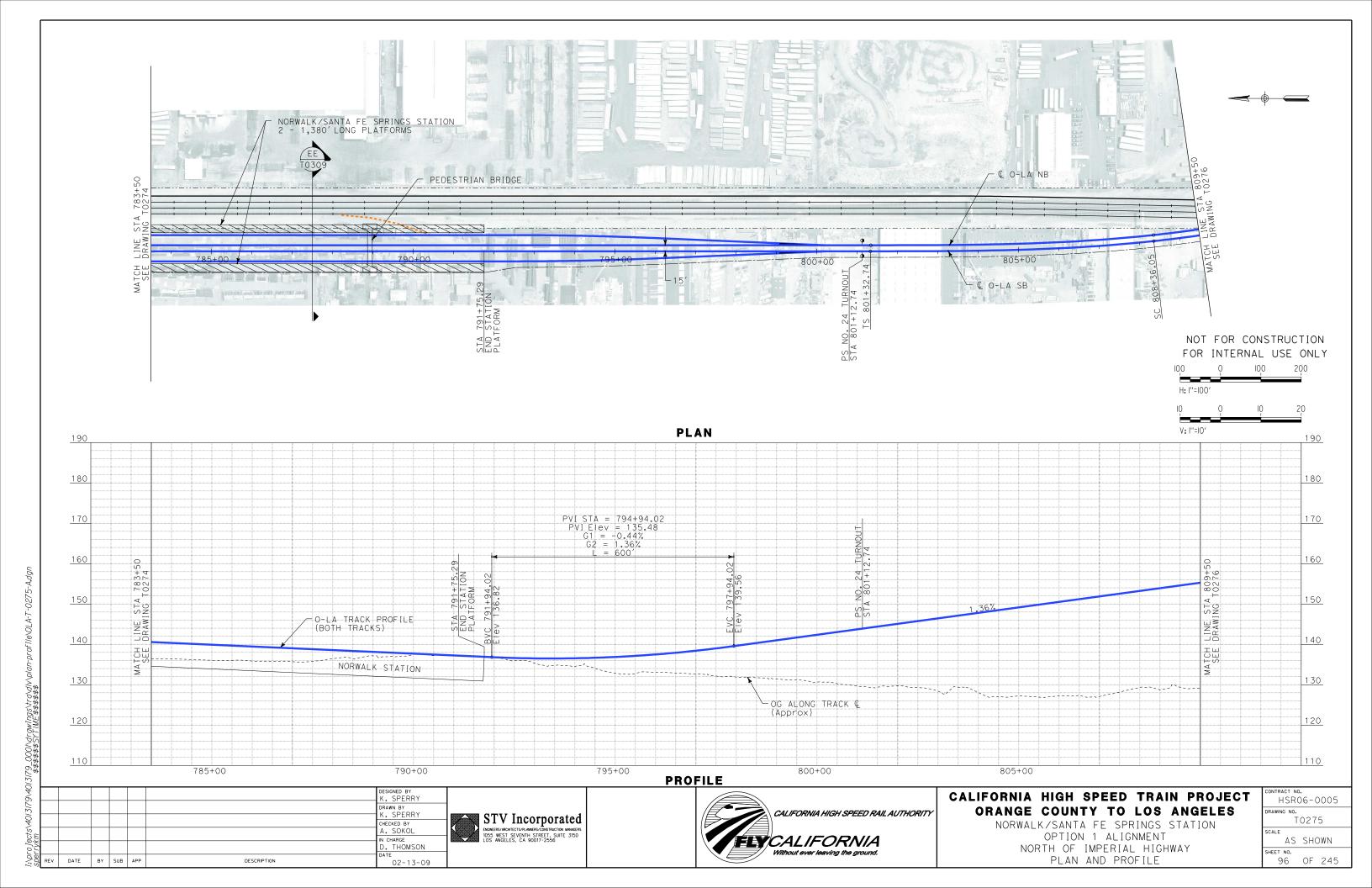


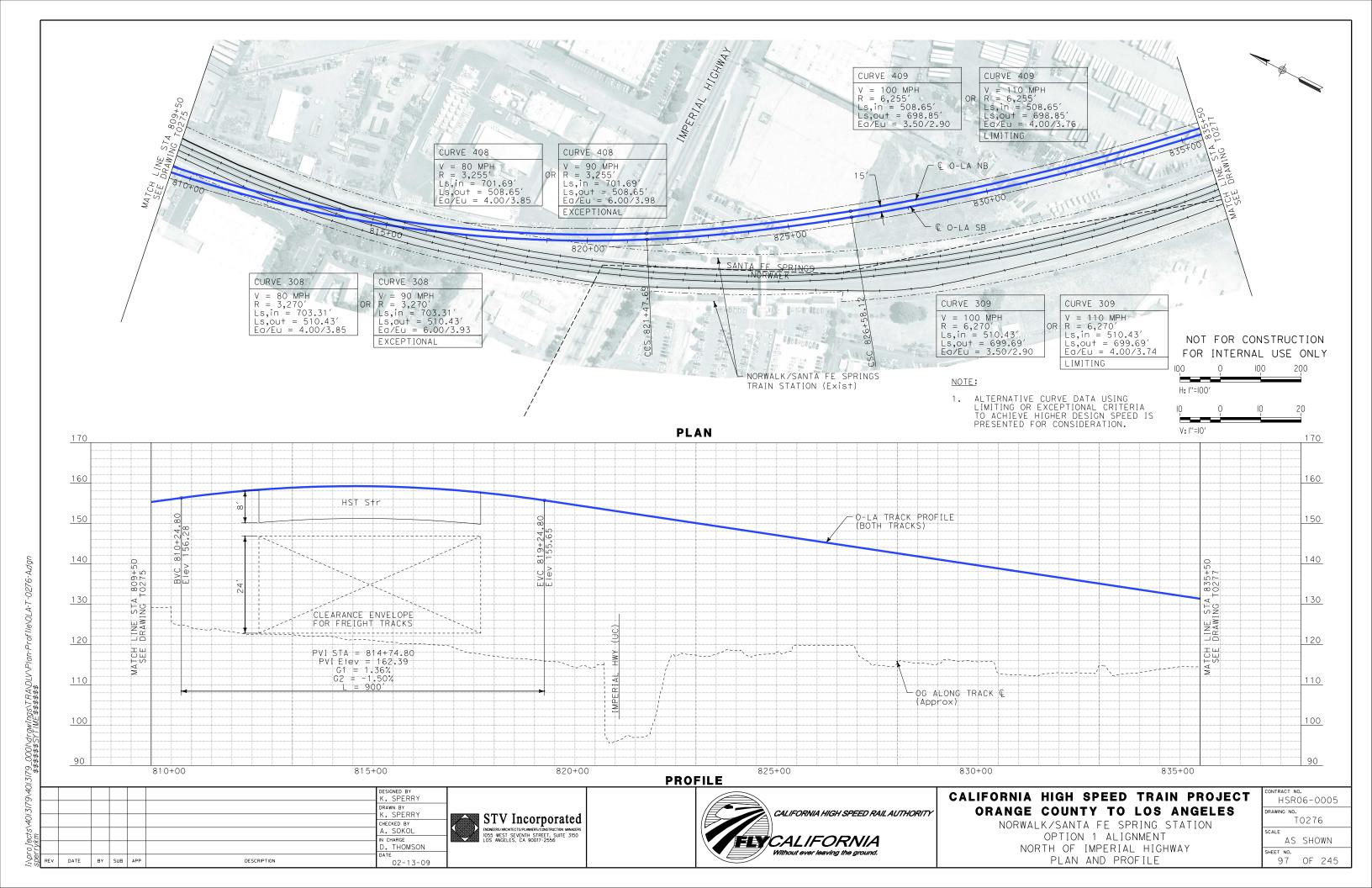


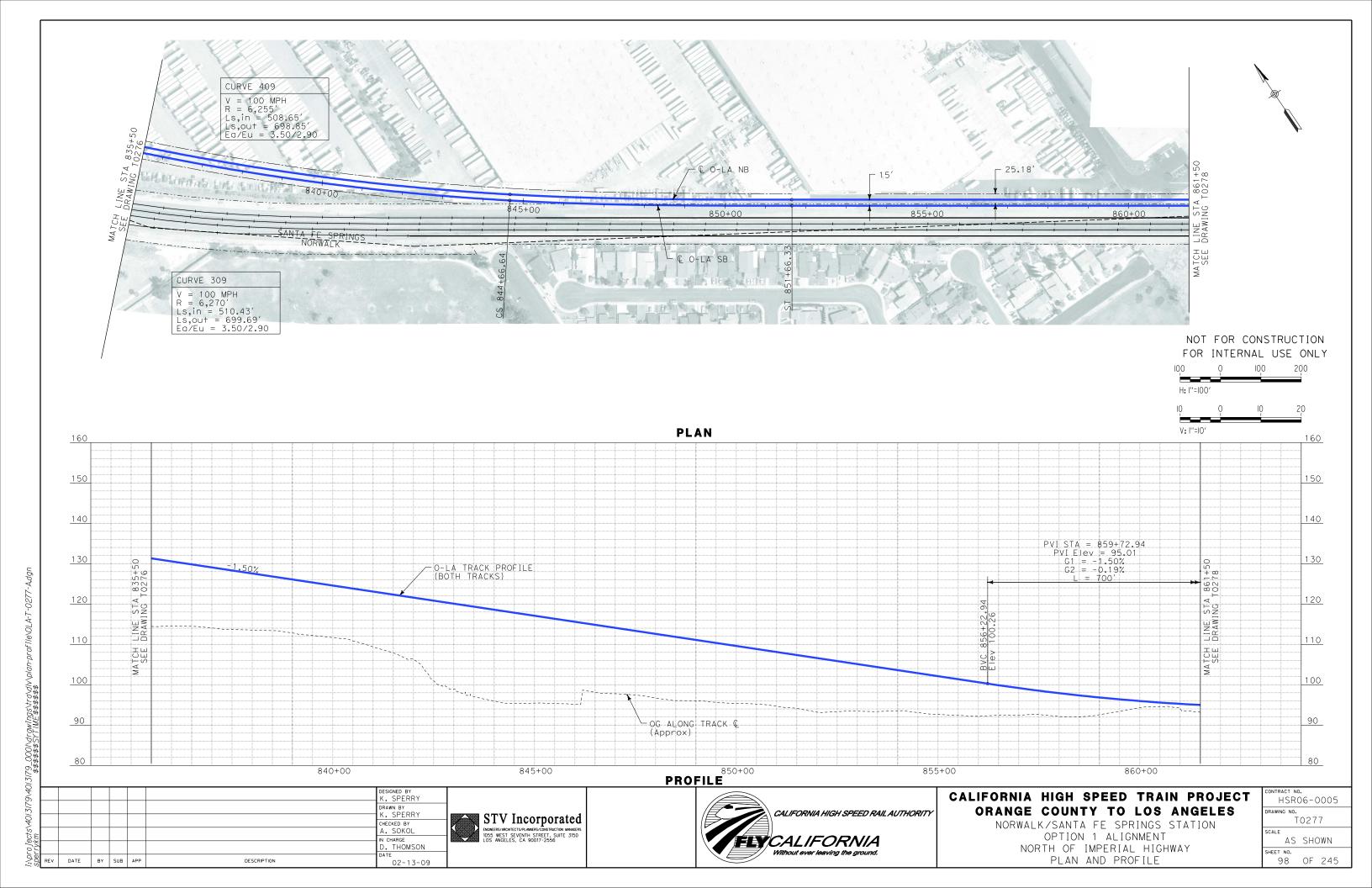


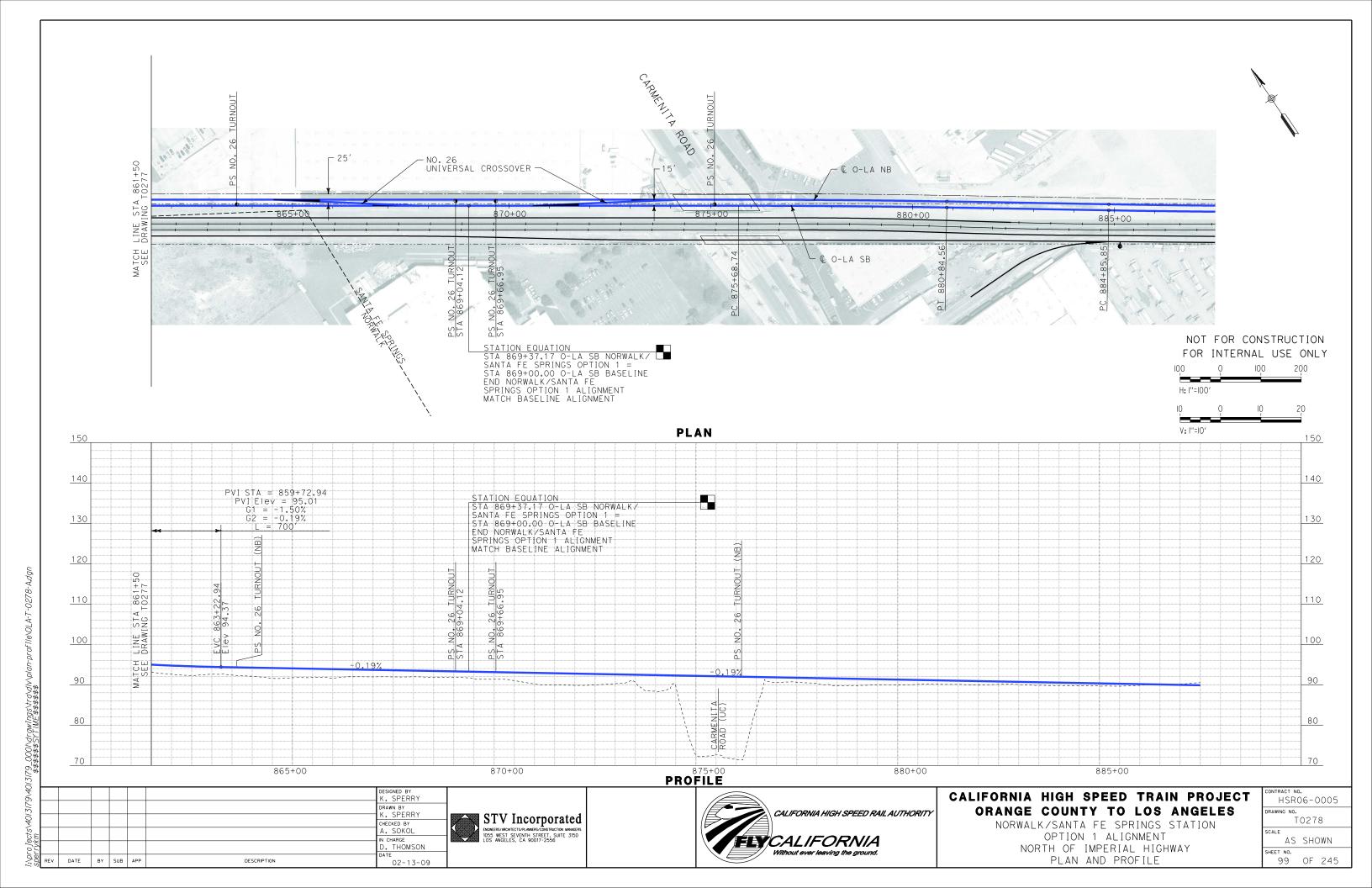


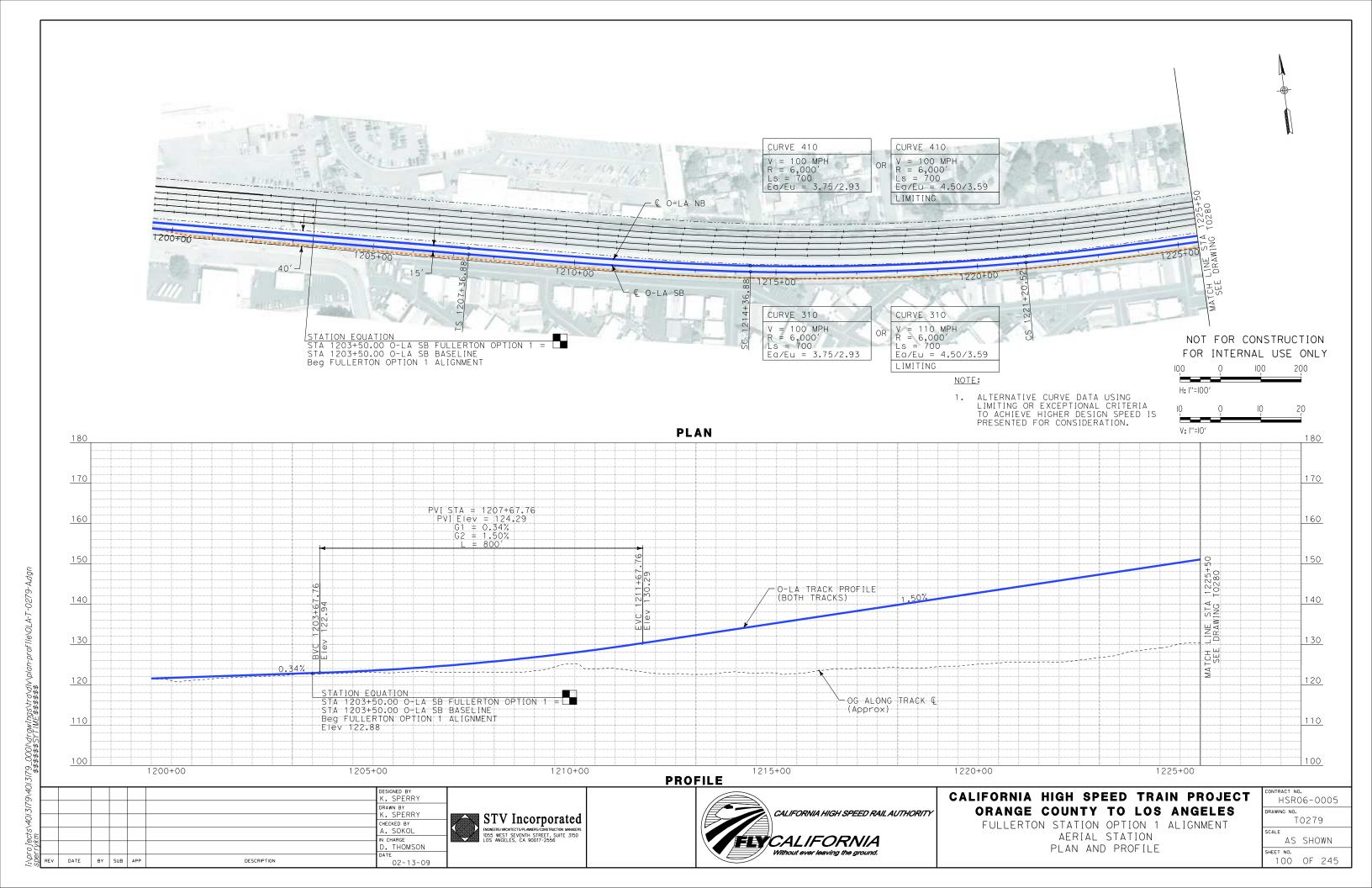


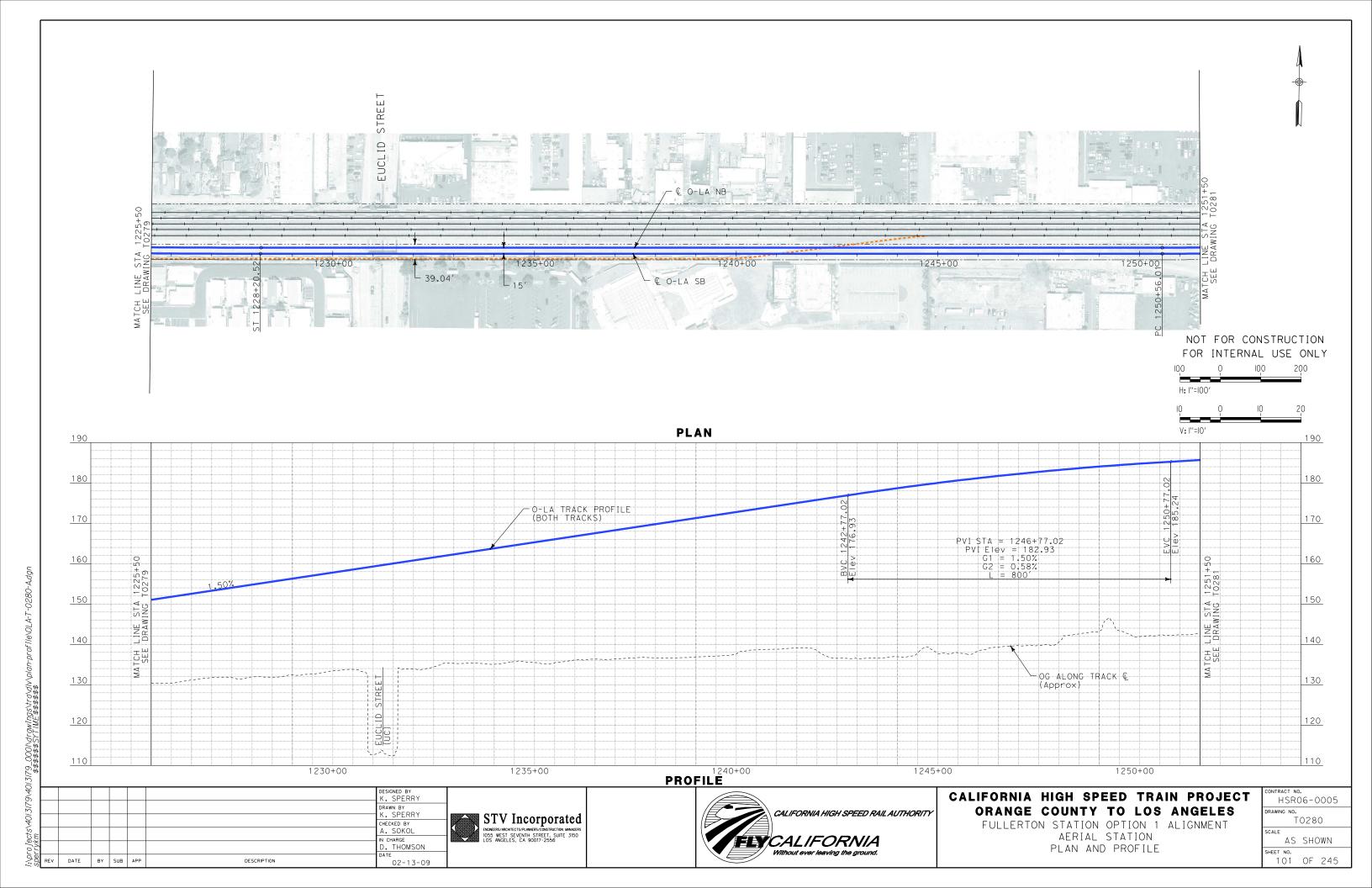


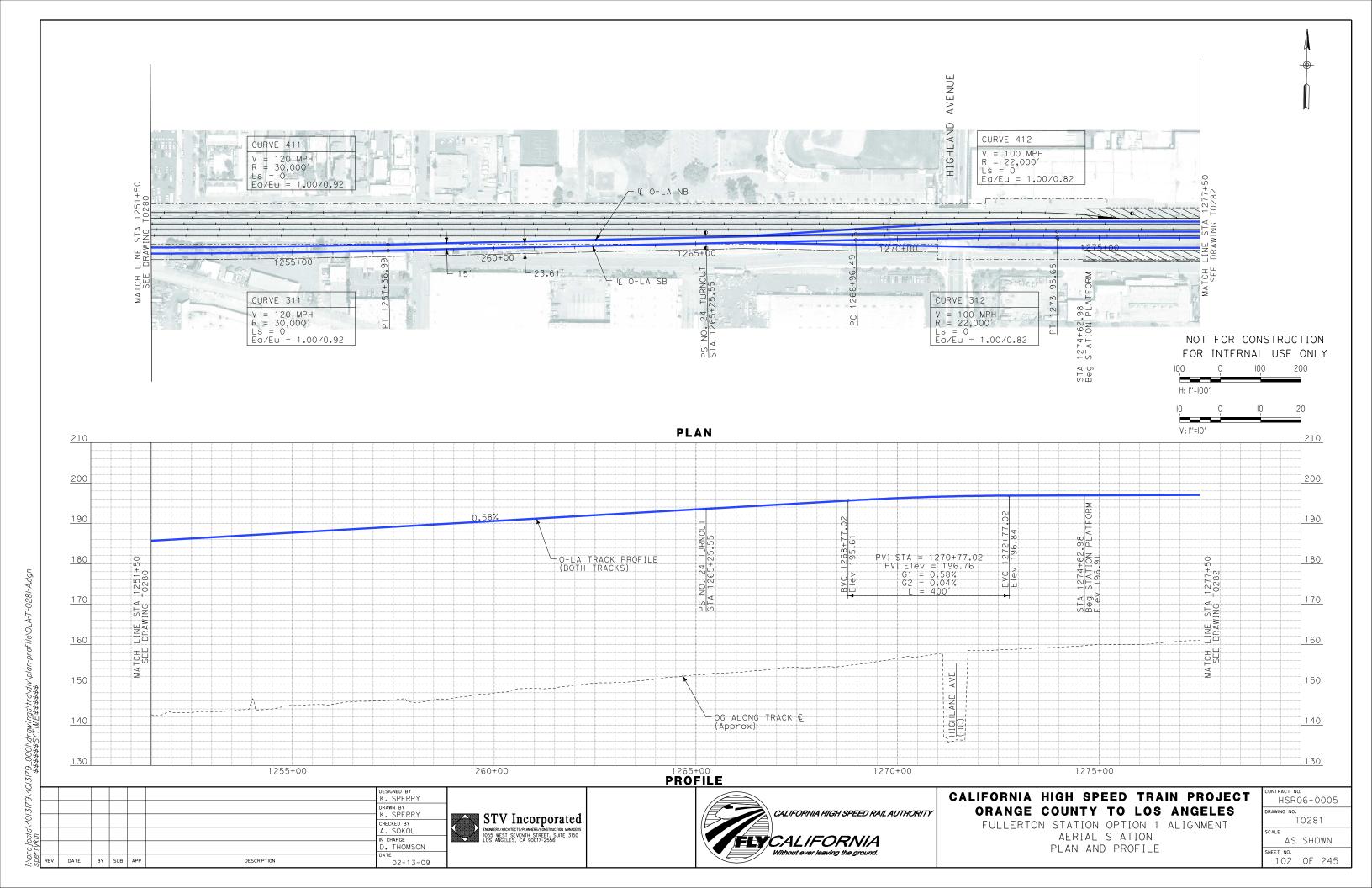


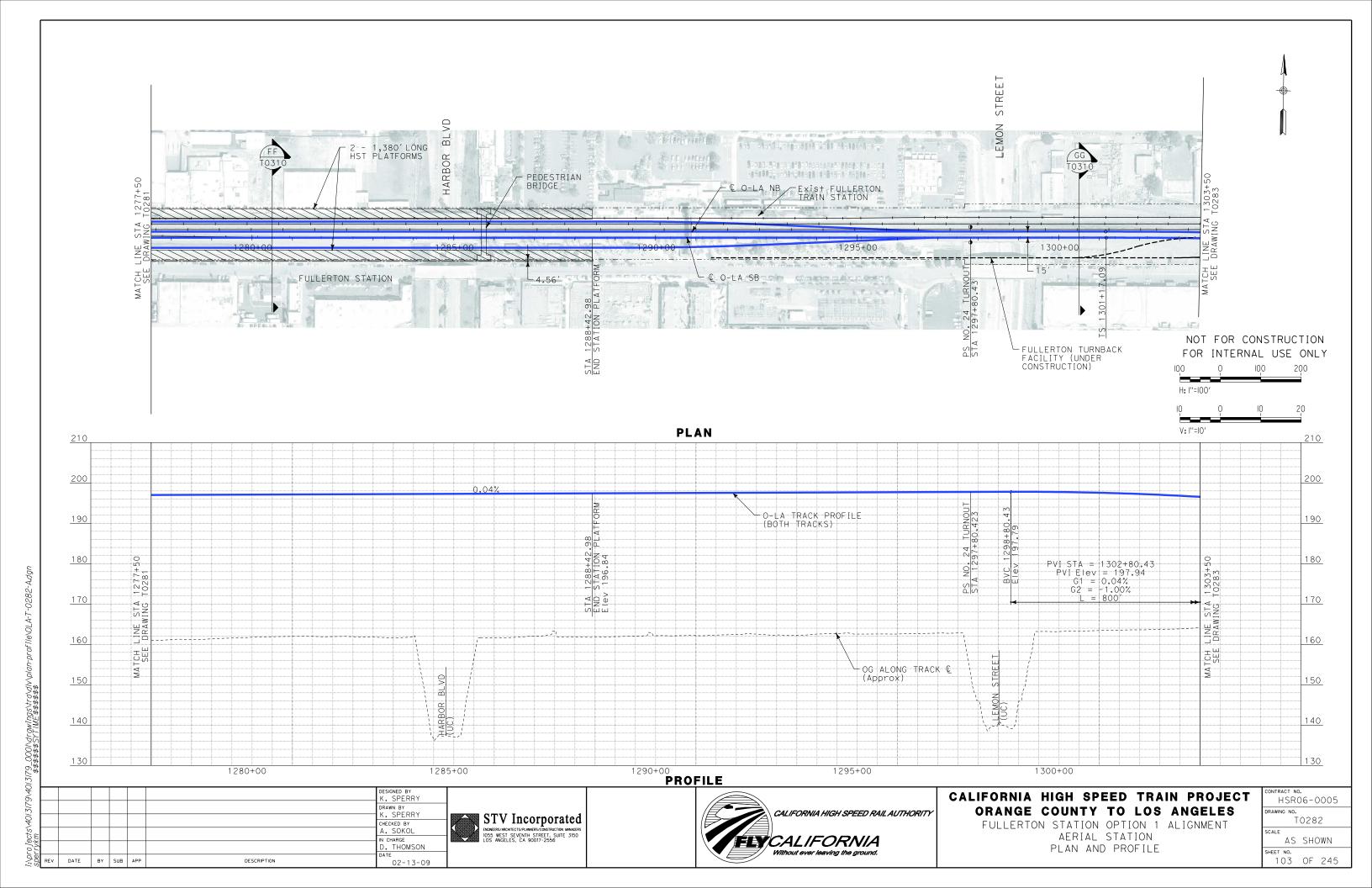


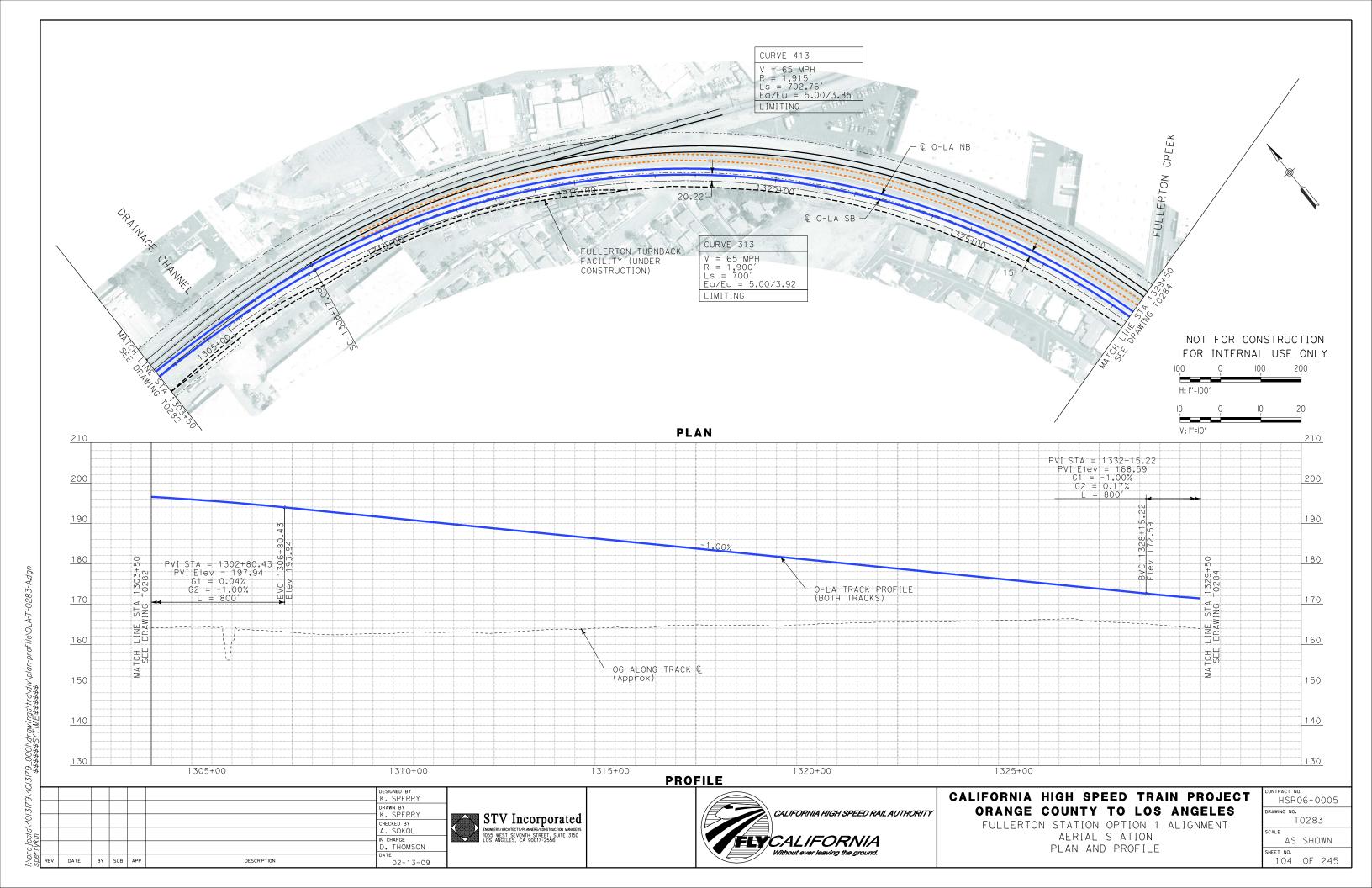


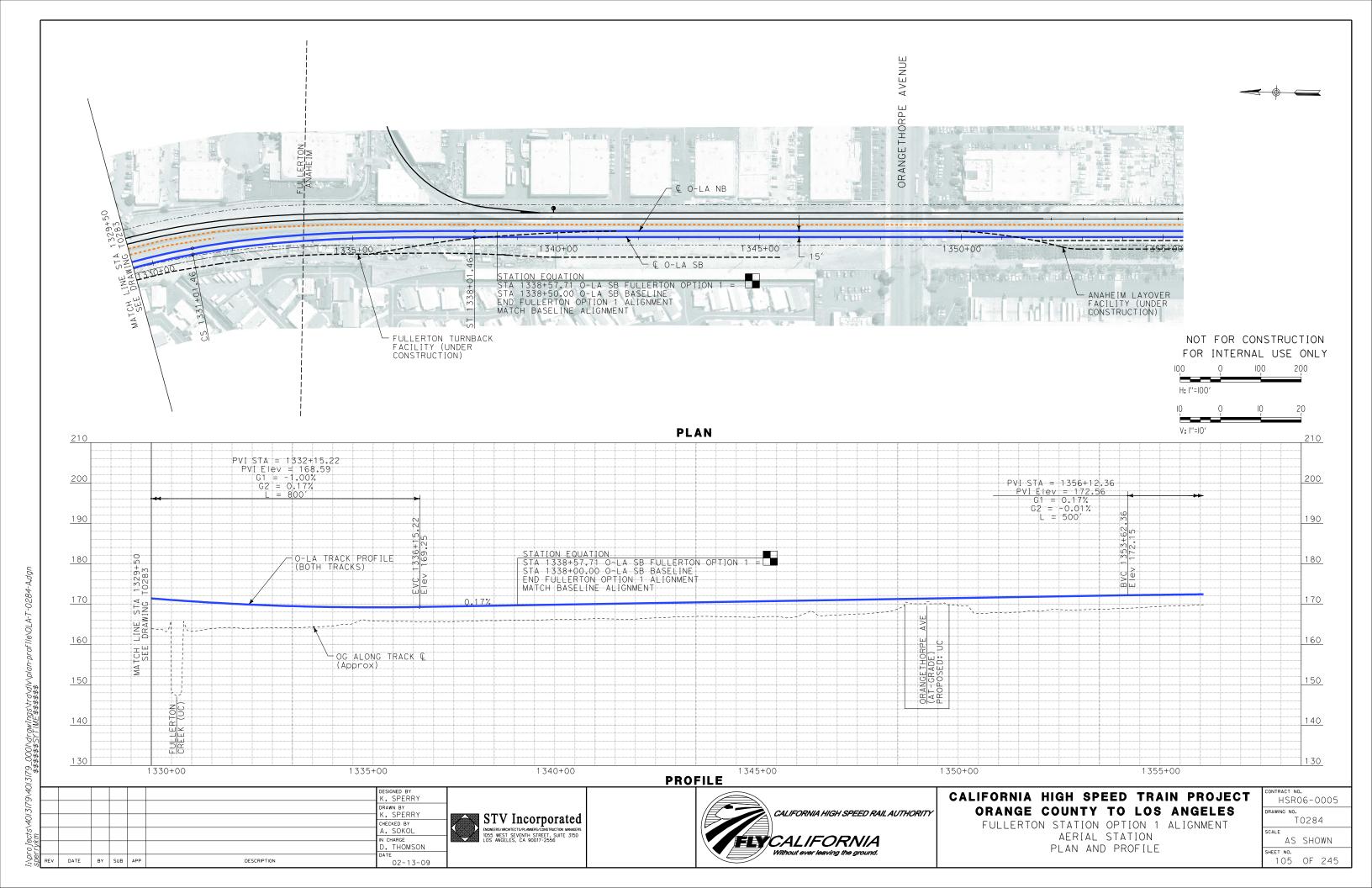


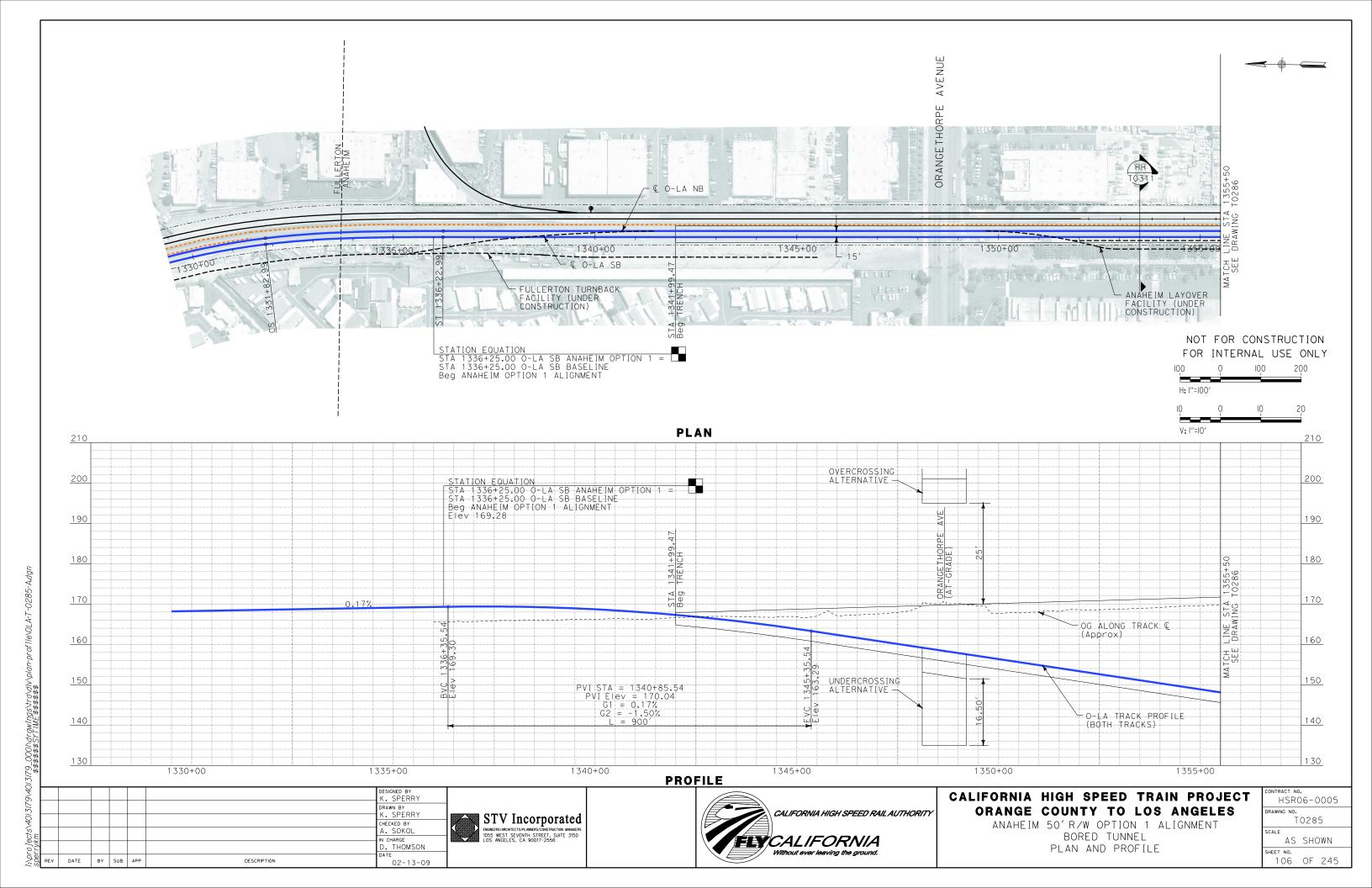


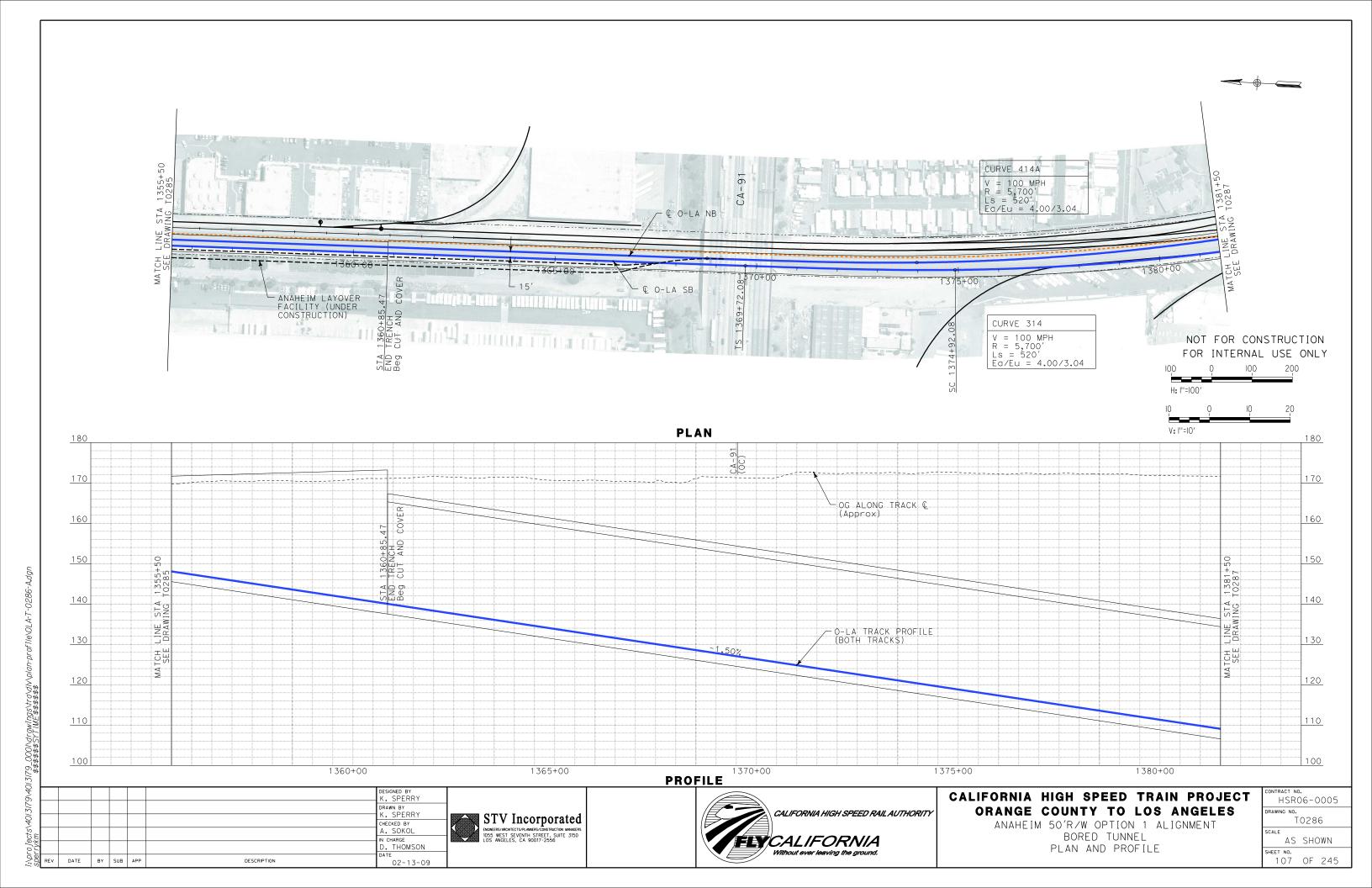


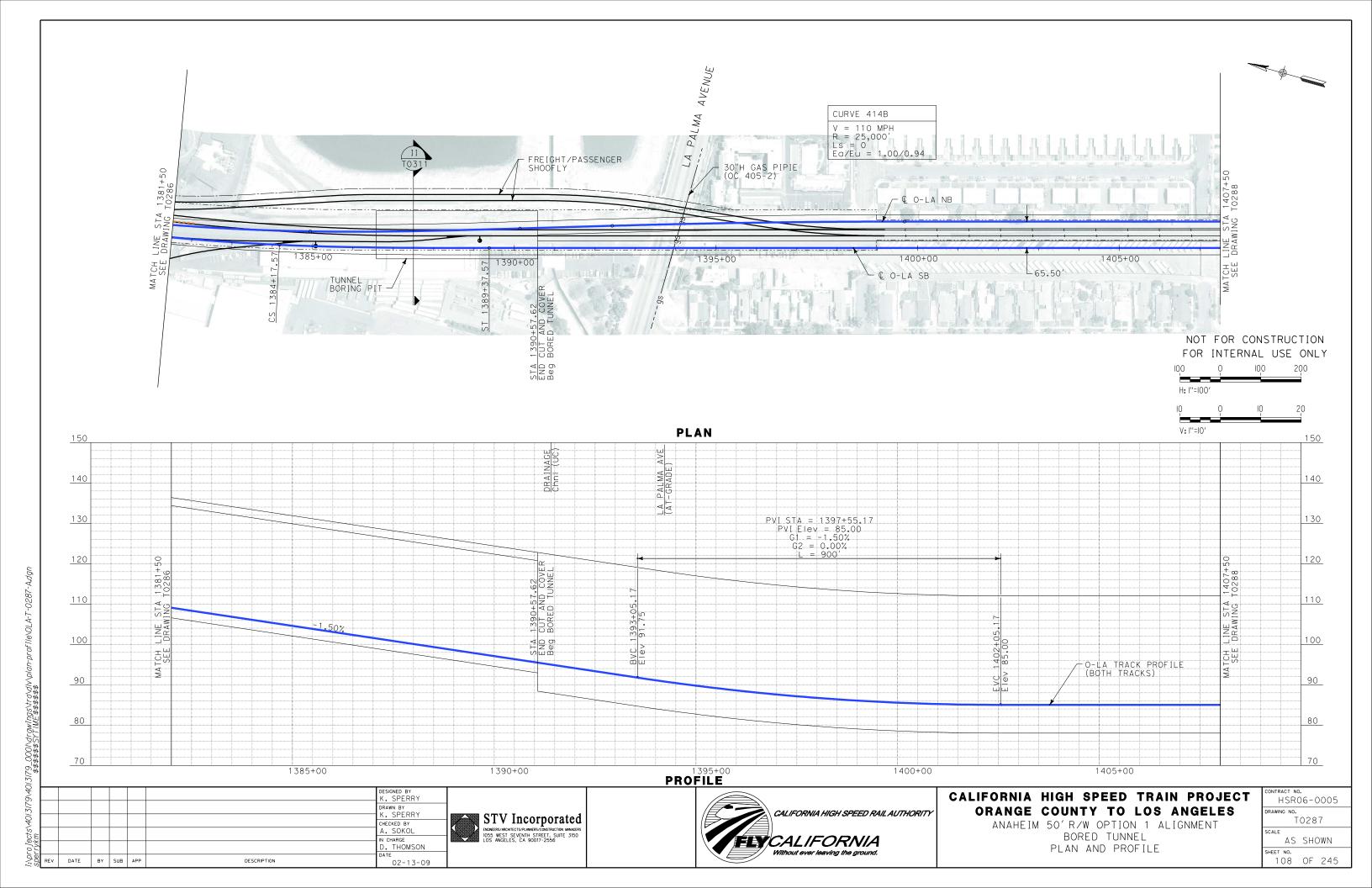


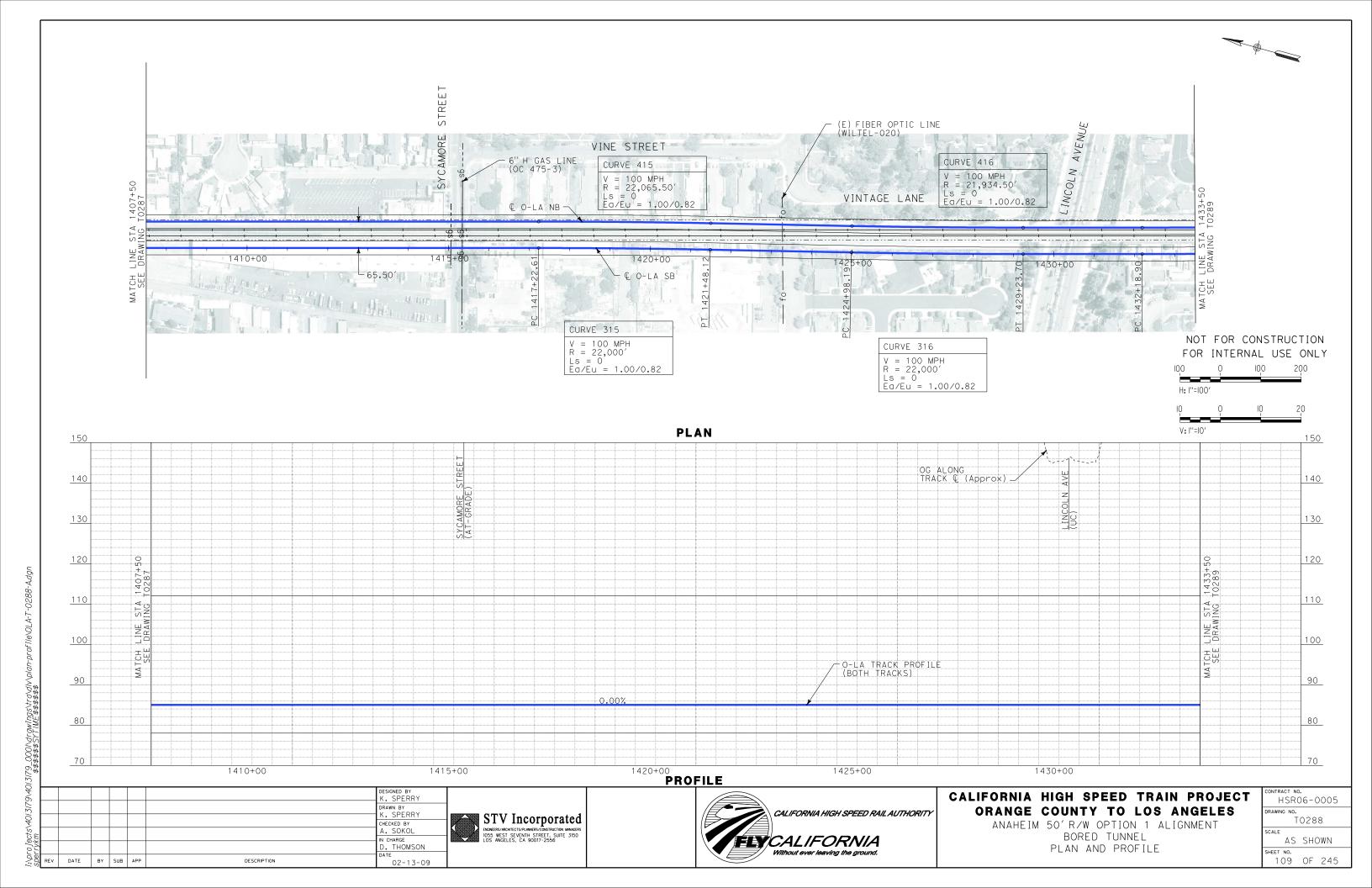


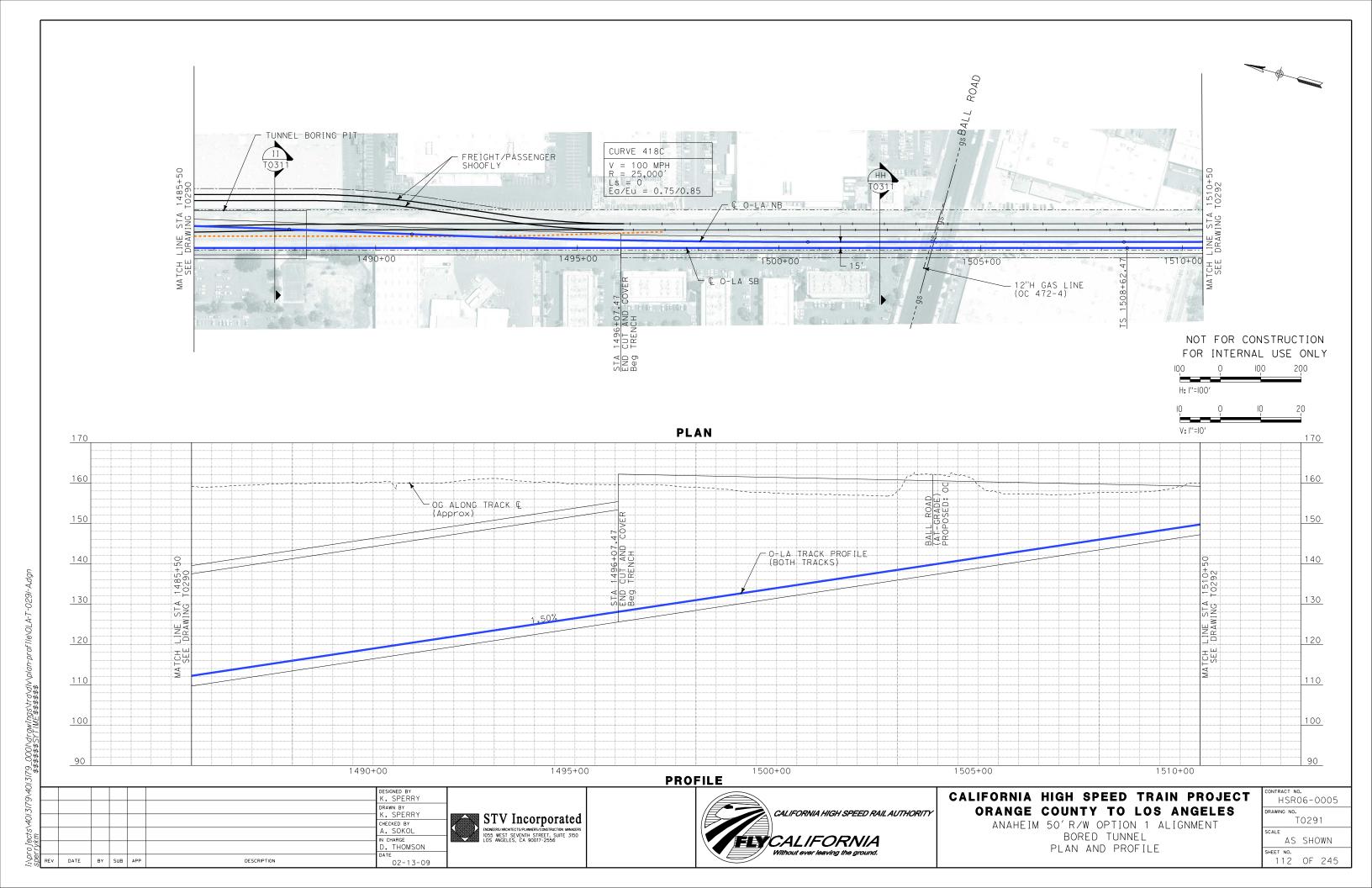


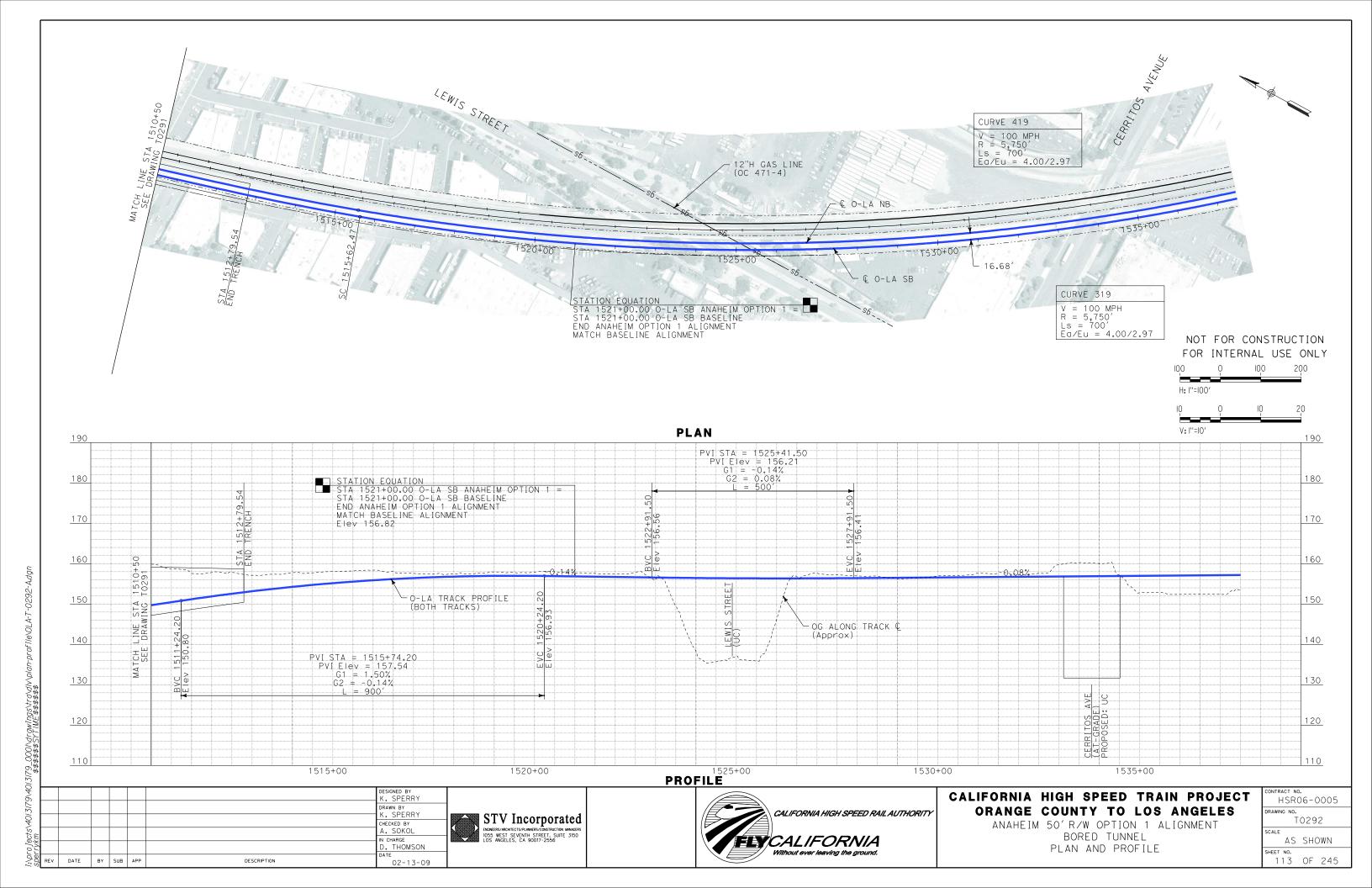










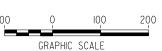


No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	TIME WARNER	COMMUNICATION	CABLE	STA 19+85	THE EXISTING COMMUNICATION LINE IS CROSSING THE PROPOSED O-LA TRACKS, DUE TO LACK OF INFORMATION OF THE ELEVATION OF THE OVERHEAD LINES, THIS WILL BE CONSIDERED A CONFLICT.	LOW RISK	
2	TIME WARNER	COMMUNICATION	CABLE	STA 22+00	THE EXISTING COMMUNICATION LINE IS CROSSING THE PROPOSED O-LA TRACKS, DUE TO LACK OF INFORMATION OF THE ELEVATION OF THE OVERHEAD LINES, THIS WILL BE CONSIDERED A CONFLICT.	LOW RISK	

LEGEND

---gs GAS LINE
---w WATER LINE
---e FIBER OPTICS LINE
---s SEWER LINE
---sd STORM DRAIN LINE
---tv TELE COMMUNICATION LINE
---tc COMMUNICATION LINE

NOT FOR CONSTRUCTION FOR INTERNAL USE ONLY



						DESIGNED BY L. HOROWITZ
						DRAWN BY Z. OHN
						CHECKED BY
						M. SATISH IN CHARGE
						D. THOMSON
REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

IIC	, JUALL							
	CONTRACT NO. HSR06-0005							
	DRAWING NO.							
	U0600							
	1" = 100'							
	SHEET NO. 114 OF 245							

No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	TIME WARNER	COMMUNICATION	CABLE	STA 29+75	THE EXISTING COMMUNICATION LINE IS CROSSING THE PROPOSED O-LA TRACKS, DUE TO LACK OF INFORMATION OF THE ELEVATION OF THE OVERHEAD LINES, THIS WILL BE CONSIDERED A CONFLICT.	LOW RISK	
2	TIME WARNER	COMMUNICATION	CABLE	STA 33+00	THE EXISTING COMMUNICATION LINE IS CROSSING THE PROPOSED O-LA TRACKS, DUE TO LACK OF INFORMATION OF THE ELEVATION OF THE OVERHEAD LINES, THIS WILL BE CONSIDERED A CONFLICT.	LOW RISK	
3	TIME WARNER	COMMUNICATION	CABLE	STA 35+00	THE EXISTING COMMUNICATION LINE IS CROSSING THE PROPOSED O-LA TRACKS, DUE TO LACK OF INFORMATION OF THE ELEVATION OF THE OVERHEAD LINES, THIS WILL BE CONSIDERED A CONFLICT.	LOW RISK	
4	EXXON MOBIL	OIL	8" ABND OIL	STA 51+30 TO STA 53+50	THE EXISTING OIL LINE IS IN CONFLICT WITH PROPOSED COLUMNS	HIGH RISK	



							L. HOROWITZ
5							DRAWN BY Z. OHN
5							CHECKED BY
5							M. SATISH IN CHARGE
3,6							D. THOMSON
ohnzm	REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
DRAWING NO.
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SCALE
1" = 100'
SHEET NO.
I 115 OF 245 1

No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	EXXON MOBIL	OIL	8" ABND OIL	STA 53+50 TO STA 63+62	THE EXISTING OIL LINE IS IN CONFLICT WITH PROPOSED COLUMNS	HIGH RISK	



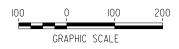
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CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO.						
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1" = 100'						
SHEET NO.						
116 OF 245						







CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005						
DRAWING NO.						
U0603						
SCALE						
1" = 100'						
SHEET NO.						
117 OF 245						

No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1 1 1	DEPARTMENT OF WATER AND POWER - POWER SERVICE	ELECTRICAL	TRANSMISSION TOWER-138 kV	STA 120+00	THE EXISTING TRANSMISSION TOWER IS TOO CLOSE TO THE PROPOSED NB TRACK	HIGH COST RELOCATION	
	DEPARTMENT OF WATER AND POWER - POWER SERVICE	ELECTRICAL	OVERHEAD ELECTRICAL LINE-138kV	STA 128+75 TO STA 130+87	THE EXISTING OVERHEAD ELECTRICAL LINES ARE CROSSING THE PROPOSED TRACKS, ACCORDING TO CPUC THE MIN, VERTICAL CLEARANCE IS 34 FT. DUE TO LACK OF INFORMATION OF THE ELEVATION OF THE OVERHEAD LINES, THIS WILL BE CONSIDERED CONFLICT TILL ELEVATION INFORMATION IS RECEIVED.	HIGH COST RELOCATION	



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CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

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CONTRACT NO. HSR06-0005								
DRAWING NO. U0604								
1'' = 100'								
SHEET NO. 118 OF 245								

No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
	DEPARTMENT OF WATER AND POWER - POWER SERVICE	ELECTRICAL	OVERHEAD ELECTRICAL LINE-138kV	STA 139+60 TO STA 140+35	THE EXISTING OVERHEAD ELECTRICAL LINES ARE CROSSING THE PROPOSED TRACKS, ACCORDING TO CPUC THE MIN, VERTICAL CLEARANCE IS 34 FT. DUE TO LACK OF INFORMATION OF THE ELEVATION OF THE OVERHEAD LINES, THIS WILL BE CONSIDERED CONFLICT TILL ELEVATION INFORMATION IS RECEIVED.	HIGH COST RELOCATION	
2	TIME WARNER	COMMUNICATION	CABLE	STA 155+00	THE EXISTING COMMUNICATION LINE IS CROSSING THE PROPOSED TRACKS, DUE TO LACK OF INFORMATION OF THE ELEVATION OF THE OVERHEAD LINES, THIS WILL BE CONSIDERED A CONFLICT.	LOW RISK	



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CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
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1" = 100'
SHEET NO. 119 OF 245
113 OF 243

No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	DEPARTMENT OF WATER AND POWER - POWER SERVICE	ELECTRICAL	OVERHEAD ELECTRICAL LINE-138kV		THE EXISTING OVERHEAD ELECTRICAL LINES ARE CROSSING THE PROPOSED TRACKS, ACCORDING TO CPUC THE MIN, VERTICAL CLEARANCE IS 34 FT. DUE TO LACK OF INFORMATION OF THE ELEVATION OF THE OVERHEAD LINES, THIS WILL BE CONSIDERED A CONFLICT.	HIGH COST RELOCATION	
2	TIME WARNER	COMMUNICATION	CABLE	STA 167+00	THE EXISTING COMMUNICATION LINE IS CROSSING THE PROPOSED TRACKS, DUE TO LACK OF INFORMATION OF THE ELEVATION OF THE OVERHEAD LINES, THIS WILL BE CONSIDERED A CONFLICT.	LOW RISK	



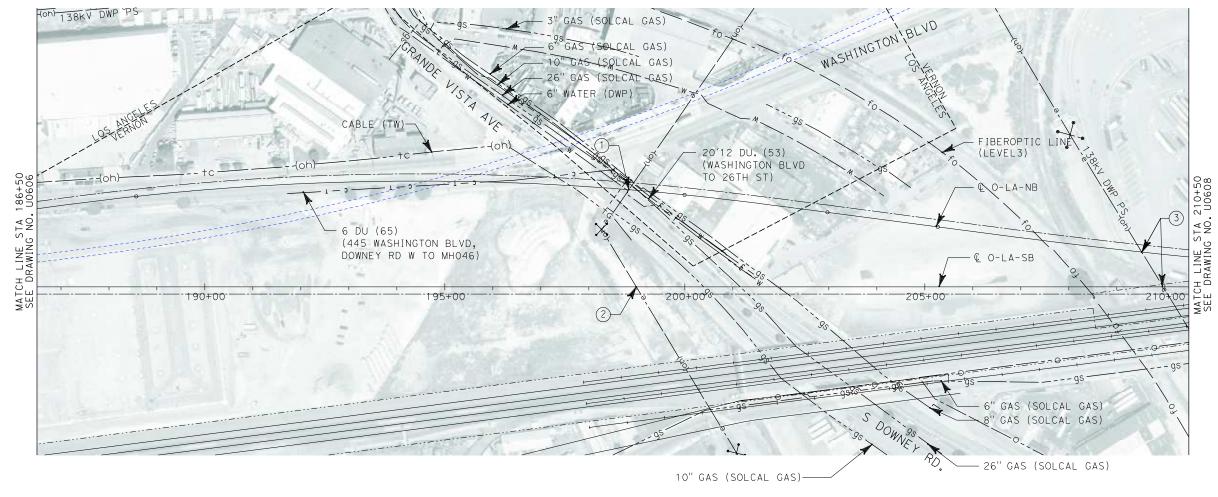
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CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO.								
HSR06-0005								
DRAWING NO.								
U0606								
SCALE								
1'' = 100'								
SHEET NO.								
120 OF 245								



No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	TIME WARNER	COMMUNICATION	CABLE	GRAND VISTA AVE	THE EXISTING COMMUNICATION LINE IS CROSSING THE PROPOSED O-LA TRACKS. DUE TO THE LACK OF INFORMATION OF THE ELEVATION OF THE COMMUNICATION LINE, THIS WILL BE CONSIDERED A CONFLICT.	LOW RISK	
2	TIME WARNER	COMMUNICATION	CABLE	STA 195+00 TO STA 196+50	THE EXISTING COMMUNICATION LINE IS CROSSING THE PROPOSED O-LA TRACKS. DUE TO THE LACK OF INFORMATION OF THE ELEVATION OF THE COMMUNICATION LINE, THIS WILL BE CONSIDERED A CONFLICT.	LOW RISK	
3	DEPARTMENT OF WATER AND POWER - POWER SERVICE	ELECTRICAL	OVERHEAD ELECTRICAL LINE-138kV	STA 199+00	THE EXISTING OVERHEAD ELECTRICAL LINES ARE CROSSING THE SB PROPOSED O-LA TRACKS.THE EXISTING TRACKS ARE LOWER THAN THE PROPOSED TRACKS. DUE TO THE ELEVATION OF PROPOSED TRACKS, THE OVERHEAD LINES DO NOT MEET THE MINMUM CRITERIA FOR VERTICAL CLEARANCE.	HIGH COST RELOCATION	
4	DEPARTMENT OF WATER AND POWER - POWER SERVICE	ELECTRICAL	OVERHEAD ELECTRICAL LINE-138kV	STA 199+00	THE EXISTING OVERHEAD ELECTRICAL LINES ARE CROSSING THE NB PROPOSED O-LA TRACKS.THE EXISTING TRACKS ARE LOWER THAN THE PROPOSED TRACKS. DUE TO THE ELEVATION OF PROPOSED TRACKS, THE OVERHEAD LINES DO NOT MEET THE MINMUM CRITERIA FOR VERTICAL CLEARANCE.	HIGH COST RELOCATION	
5	DEPARTMENT OF WATER AND POWER - POWER SERVICE	ELECTRICAL	OVERHEAD ELECTRICAL LINE-138kV	STA 210+00	THE EXISTING OVERHEAD ELECTRICAL LINES ARE CROSSING THE PROPOSED O-LA TRACKS.THE EXISTING TRACKS ARE LOWER THAN THE PROPOSED TRACKS. DUE TO THE ELEVATION OF PROPOSED TRACKS, THE OVERHEAD LINES DO NOT MEET THE MINMUM CRITERIA FOR VERTICAL CLEARANCE.	HIGH COST RELOCATION	



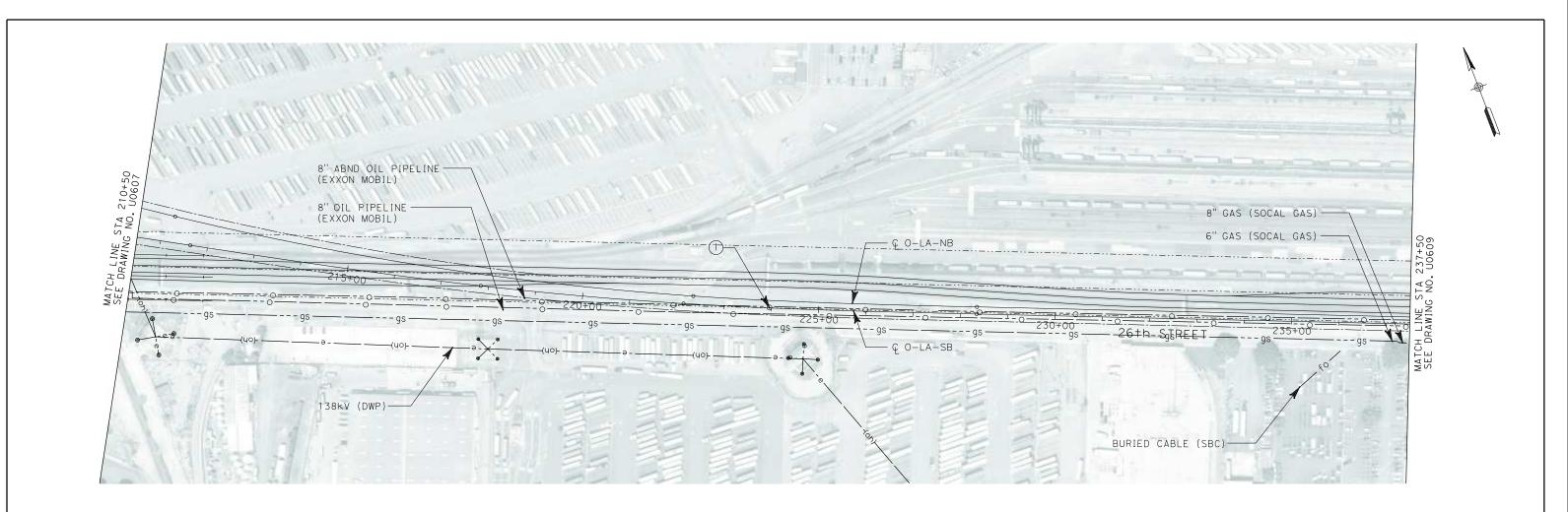
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101							DRAWN BY Z. OHN	
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ohnzm							IN CHARGE D. THOMSON	
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CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

Γ	CONTRACT NO. HSR06-0005
	DRAWING NO. U0607
	1" = 100'
	SHEET NO. 121 OF 245



No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	EXXON MOBILE	OIL	8" ABND OIL PIPELINE	STA 225+32 TO STA 237+50	THE OIL LINE IS IN CONFLICT WITH A PROPOSED COLUMNS	HIGH RISK	



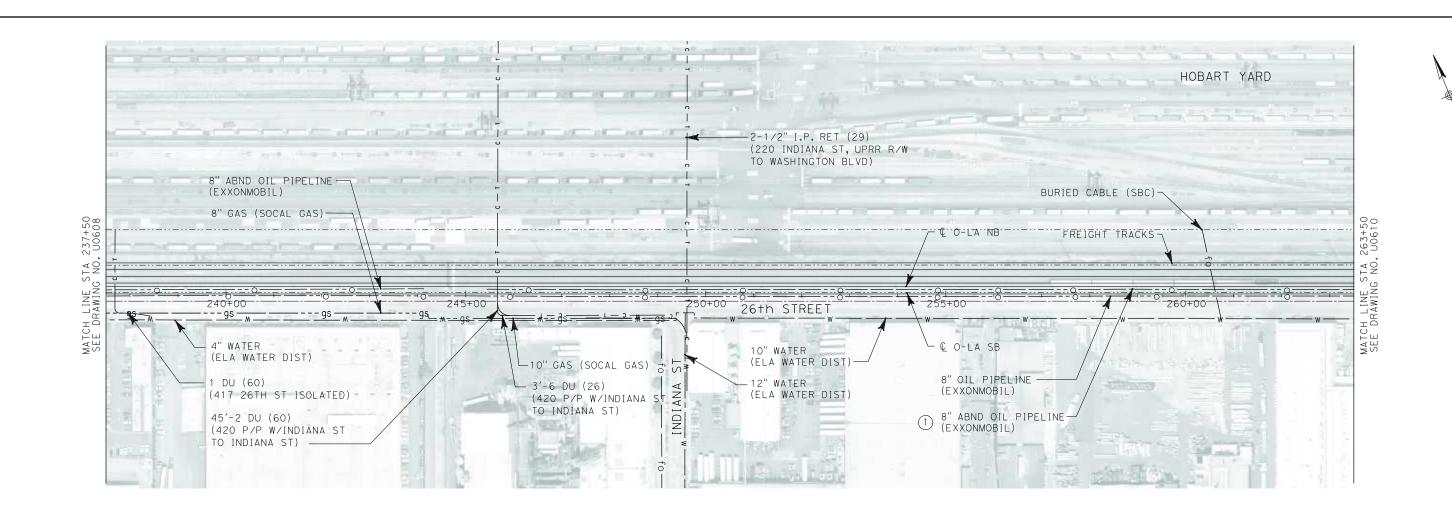
							L. HOROWITZ
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							M. SATISH IN CHARGE
, e							D. THOMSON
ohnzm	REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

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CONTRACT NO. HSR06-0005							
DRAWING NO. U0608							
1'' = 100'							
SHEET NO. 122 OF 245							



No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	EXXON MOBILE	OIL	8" ABND OIL PIPELINE	STA 237+50 TO STA 263+50	THE OIL LINE IS IN CONFLICT WITH PROPOSED COLUMNS	HIGH RISK	



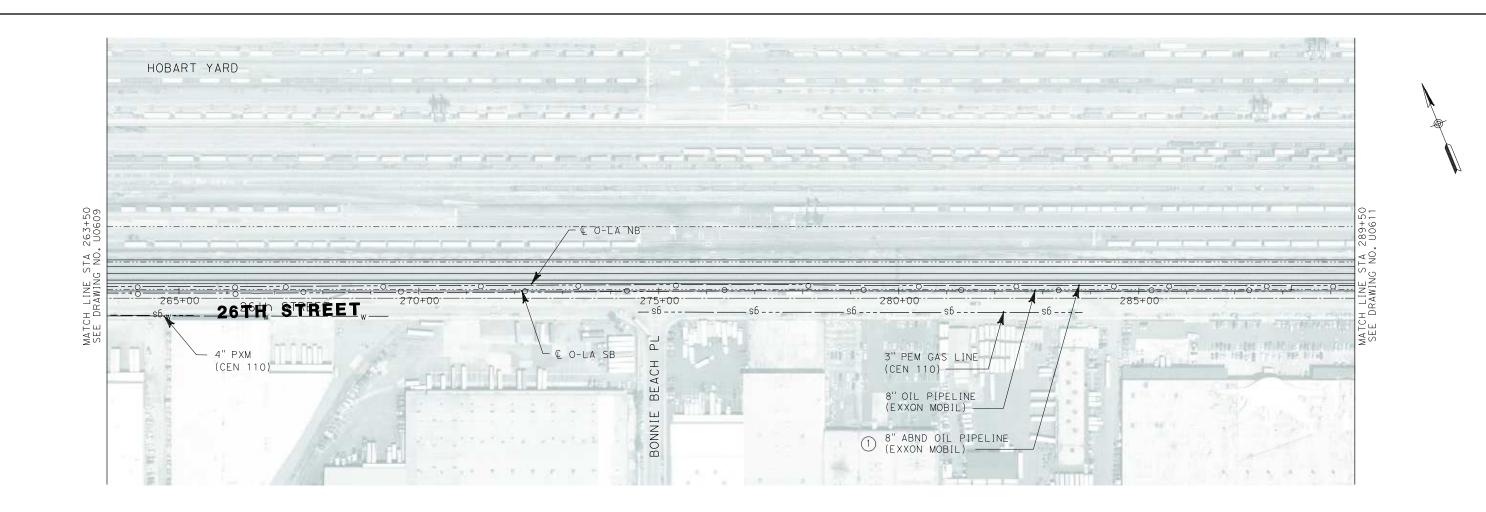
						L. HOROWITZ
						DRAWN BY Z. OHN
						CHECKED BY
						M. SATISH IN CHARGE
						D. THOMSON
REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO.								
HSR06-0005								
DRAWING NO.								
U0609								
SCALE								
1'' = 100'								
SHEET NO.								
123 OF 245								



No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	EXXON MOBIL	OIL	8" ABND OIL PIPELINE	STA 263+50 TO STA 269+30	THE OIL LINE IS IN CONFLICT WITH PROPOSED COLUMNS	HIGH RISK	



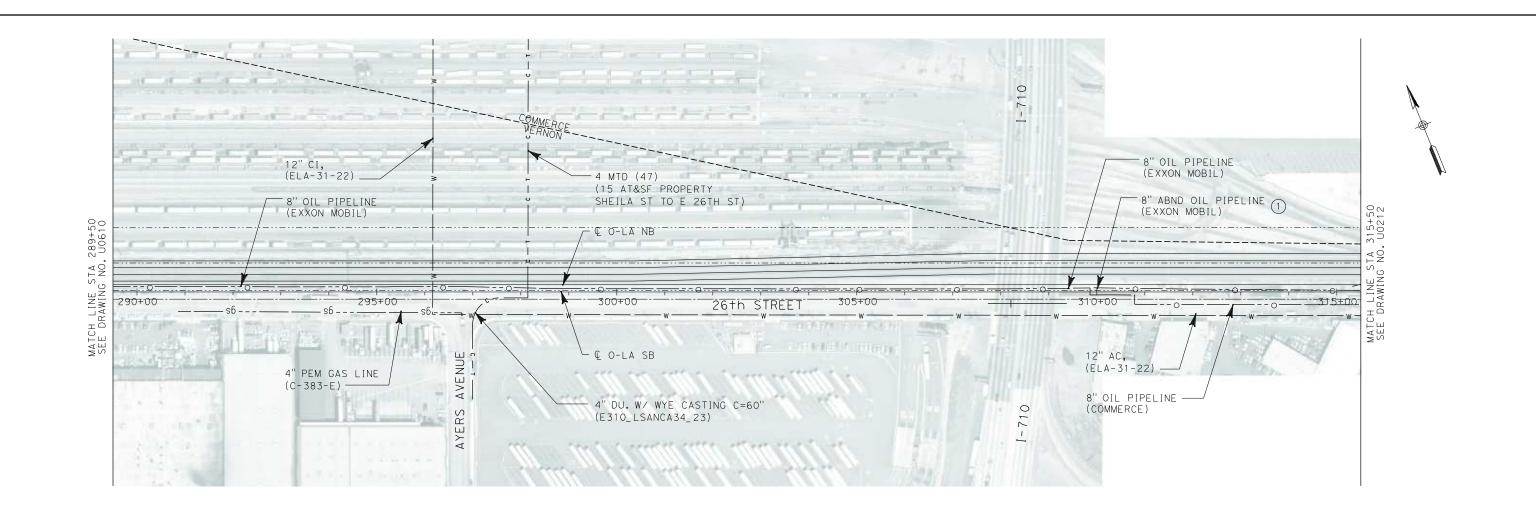
							L. HOROWITZ
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CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005						
DRAWING NO. U0610						
1" = 100'						
SHEET NO. 124 OF 245						



No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	EXXON MOBIL	OIL	8" ABND OIL PIPELINE	STA 297+52 TO STA 313+00	THE OIL LINE IS IN CONFLICT WITH PROPOSED COLUMNS	HIGH RISK	



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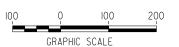




CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005								
DRAWING NO.								
U0611								
1" = 100'								
SHEET NO. 125 OF 245								

No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	SCE	ELECTRICAL	66 kV	ATLANTIC BLVD	THE EXISTING POWER POLE IS IN CONFLICT WITH THE WIDENING OF THE ATLANTIC BYLD BRIDGE.	HIGH COST RELOCATION	
2	SCE	ELECTRICAL	66 kV	ATLANTIC BLVD	THE EXISTING OVERHEAD ELECTRICAL LINES ARE CROSSING THE PROPOSED TRACKS, ACCORDING TO CPUC THE MIN, VERTICAL CLEARANCE IS 34 FT. DUE TO LACK OF INFORMATION OF THE ELEVATION OF THE OVERHEAD LINES, THIS WILL BE CONSIDERED A CONFLICT.	HIGH COST RELOCATION	
3	SCE	ELECTRICAL	66 kV	STA 317+82 TO STA 339+28	THE EXISTING OVERHEAD ELECTRICAL LINES ARE CROSSING THE PROPOSED TRACKS AND THEY ARE IN CONFLICT WITH PROPOSED COLUMNS.	HIGH COST RELOCATION	



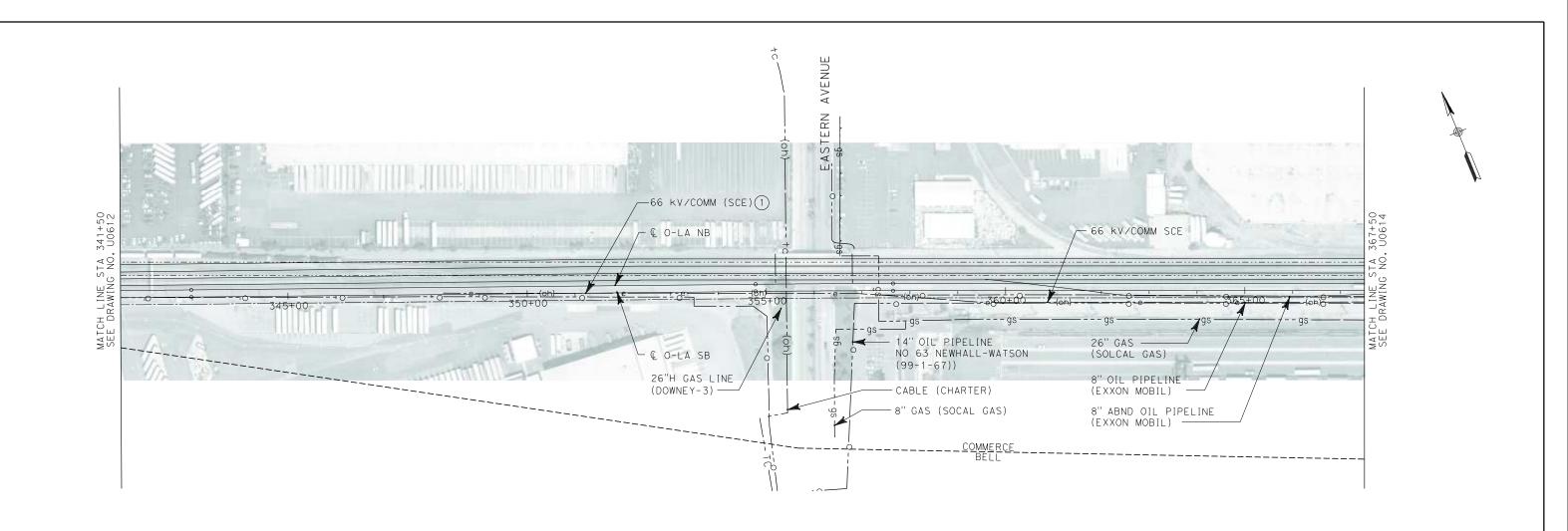
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CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
DRAWING NO. U0612
1'' = 100'
SHEET NO. 126 OF 245



No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	SCE	ELECTRICAL	66Kv/COMM	STA 348+28 TO STA 356+00	THE OVERHEAD ELECTRICAL LINES ARE TOO CLOSE TO THE NB O-LA PROPOSED TRACK	HIGH COST RELOCATION	



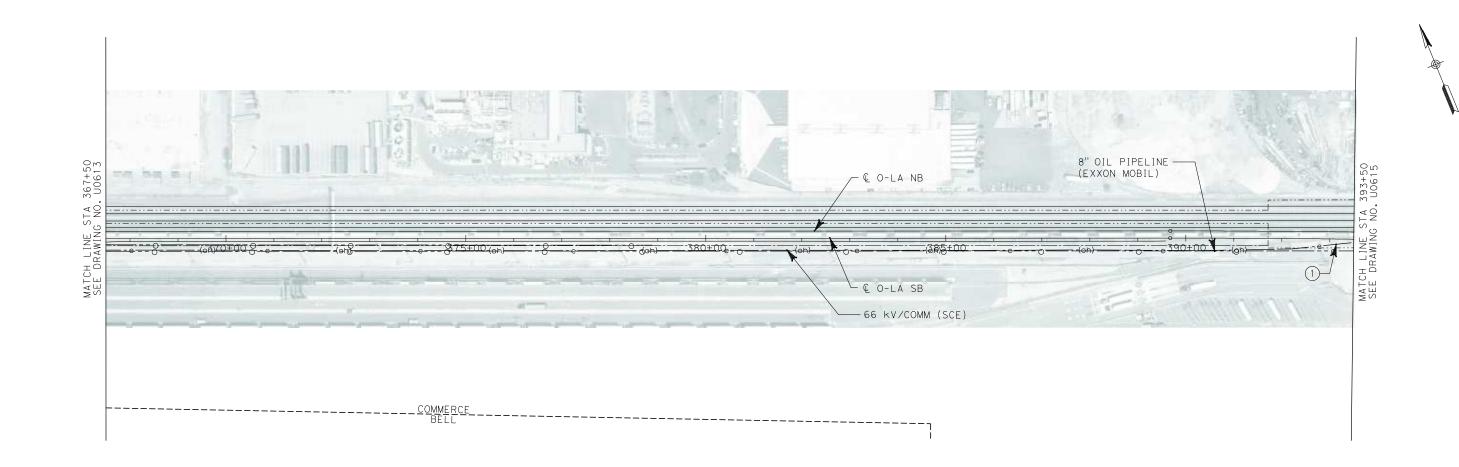
						DESIGNED BY L. HOROWITZ
						DRAWN BY Z. OHN
						CHECKED BY M. SATISH
						IN CHARGE D. THOMSON
REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSRO6-0005
DRAWING NO. U0613
1'' = 100'
SHEET NO. 127 OF 245



No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	SCE	ELECTRICAL	66Kv/COMM	STA 394+00	THE EXISTING OVERHEAD ELECTRICAL LINES ARE CROSSING THE SB PROPOSED O-LA TRACK	HIGH COST RELOCATION	



REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09
						D. THOMSON
						M. SATISH IN CHARGE
						CHECKED BY
						DRAWN BY Z. OHN
						L. HOROWITZ





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
DRAWING NO. U0614
1'' = 100'
SHEET NO. 128 OF 245

No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1 SCE		ELECTRICAL	220kV	STA 396+65	THE EXISTING OVERHEAD ELECTRICAL LINES ARE CROSSING THE PROPOSED O-LA TRACKS.THE EXISTING TRACKS ARE LOWER THAN THE PROPOSED TRACKS. DUE TO THE ELEVATION OF PROPOSED TRACKS, THE OVERHEAD LINES DO NOT MEET THE MINMUM CRITERIA FOR VERTICAL CLEARANCE	HIGH COST RELOCATION	
2 SCE		ELECTRICAL	220kV	STA 397+13	THE EXISTING OVERHEAD ELECTRICAL LINES ARE CROSSING THE PROPOSED O-LA TRACKS.THE EXISTING TRACKS ARE LOWER THAN THE PROPOSED TRACKS. DUE TO THE ELEVATION OF PROPOSED TRACKS, THE OVERHEAD LINES DO NOT MEET THE MINMUM CRITERIA FOR VERTICAL CLEARANCE.	HIGH COST RELOCATION	
3 EXXON N	MOBIL	OIL	8" OIL PIPELINE	STA 407+47	THE OIL LINE IS IN CONFLICT WITH THE PROPOSED COLUMN	HIGH RISK	



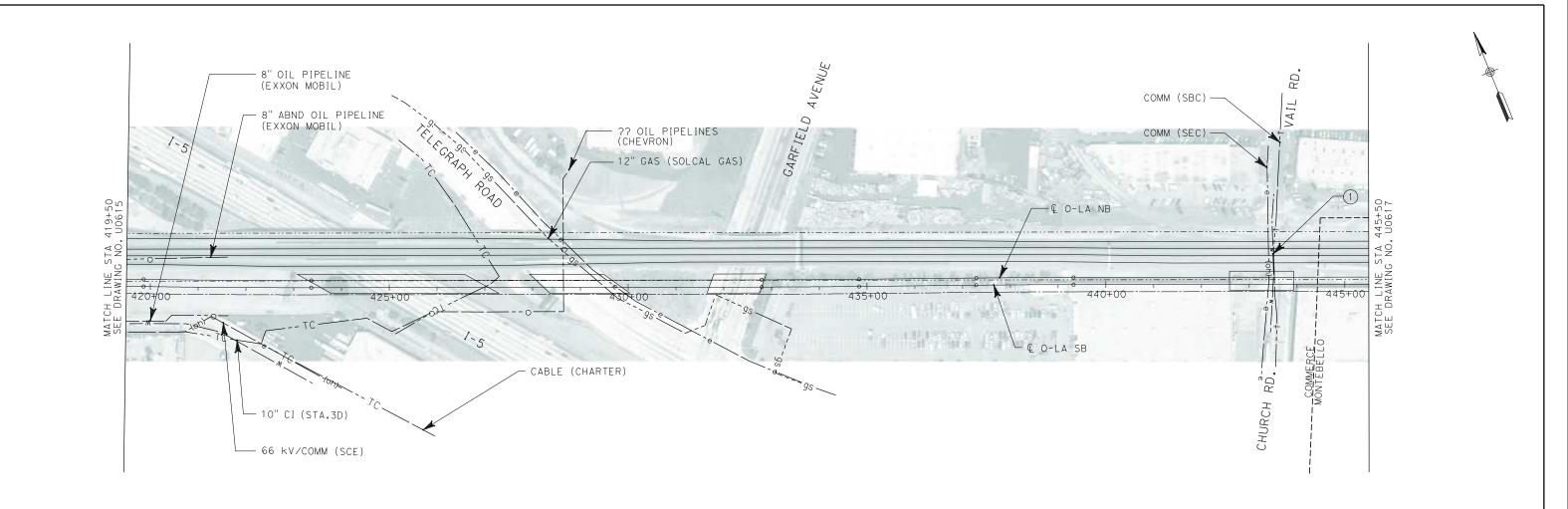
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							M. SATISH
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ohnZm	REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
DRAWING NO.
U0615
1'' = 100'
SHEET NO. 129 OF 245



No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	MWD	WATER	73" MWD WATER	VAIL NOAD	THE WATER LINE WILL NEED TO BE ENCASED BECAUSE THE EXISTING AND PROPOSED TRACKS ARE IN THE SAME ELEVATION.	HIGH COST RELOCATION	



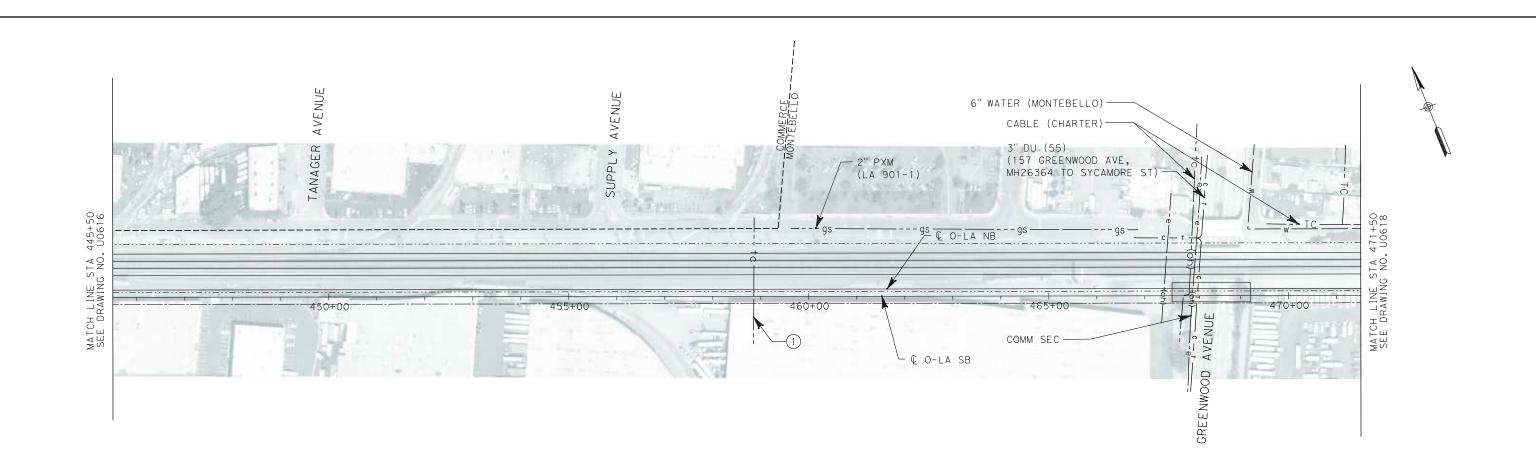
5							L. HOROWITZ
5							DRAWN BY Z. OHN
							CHECKED BY
							M. SATISH IN CHARGE
Za,							D. THOMSON
ohnzm	REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
DRAWING NO. U0616
1'' = 100'
SHEET NO. 130 OF 245



No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
	CHARTER COMMUNICATION	COMMUNICATION	CABLE	31A 430103	THE CABLE LINE WILL NEED TO BE ENCASED BECAUSE THE EXISTING AND PROPOSED TRACKS ARE IN THE SAME ELEVATION.	LOW RISK	



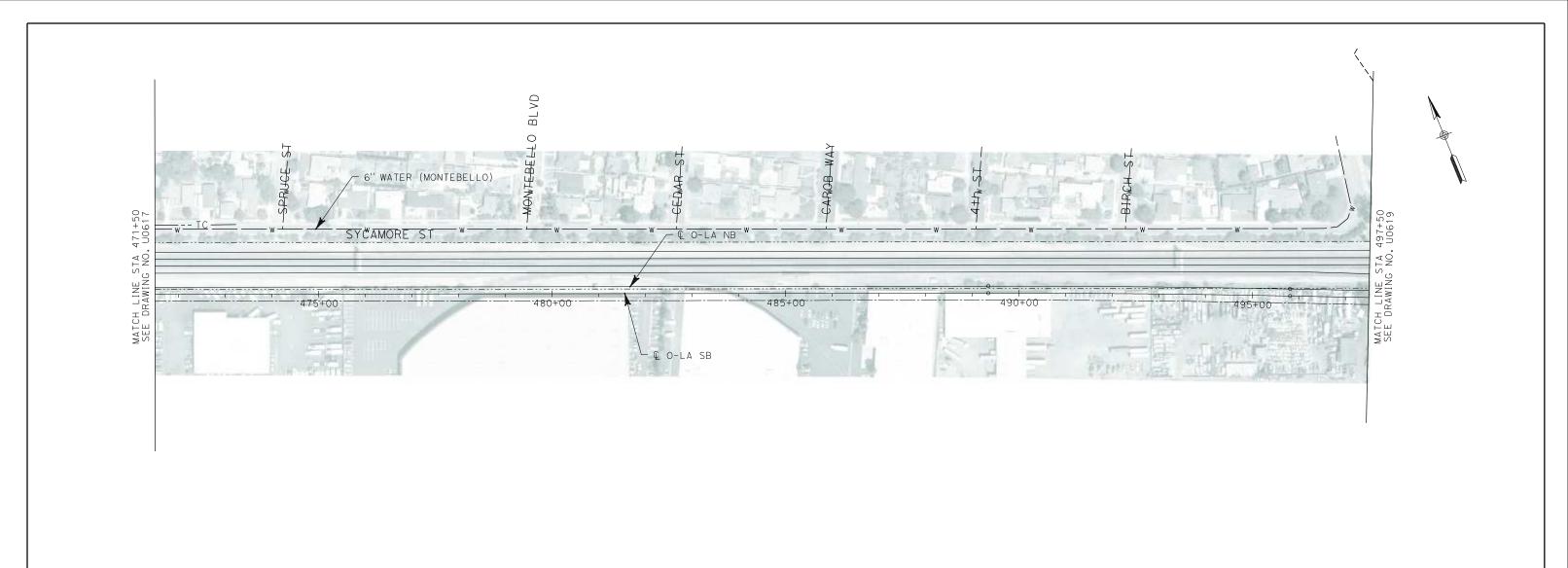
REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09
						D. THOMSON
						M. SATISH IN CHARGE
						CHECKED BY
						DRAWN BY Z. OHN
						L. HOROWITZ





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
DRAWING NO. U0617
1'' = 100'
SHEET NO. 131 OF 245





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CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO.
HSR06-0005
DRAWING NO.
U0618
SCALE
1" = 100'
SHEET NO.
132 OF 245

No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
	DEPARTMENT OF WATER AND POWER - POWER SERVICE	ELECTRICAL	TRANSMISSION TOWER-138kV	STA 510+22	THE EXISTING OVERHEAD ELECTRICAL LINES ARE CROSSING THE PROPOSED O-LA TRACKS.THE EXISTING TRACKS ARE LOWER THAN THE PROPOSED TRACKS. DUE TO THE ELEVATION OF PROPOSED TRACKS, THE OVERHEAD LINES DO NOT MEET THE MINMUM CRITERIA FOR VERTICAL CLEARANCE.	HIGH COST RELOCATION	
2	SCE	ELECTRICAL	66Kv/COMM	PARAMOUNT BLVD.	EXISTING POWER POLE IS IN CONFLICT WITH THE PROPOSED WIDENING OF PARAMOUNT BRIDGE.	HIGH COST RELOCATION	



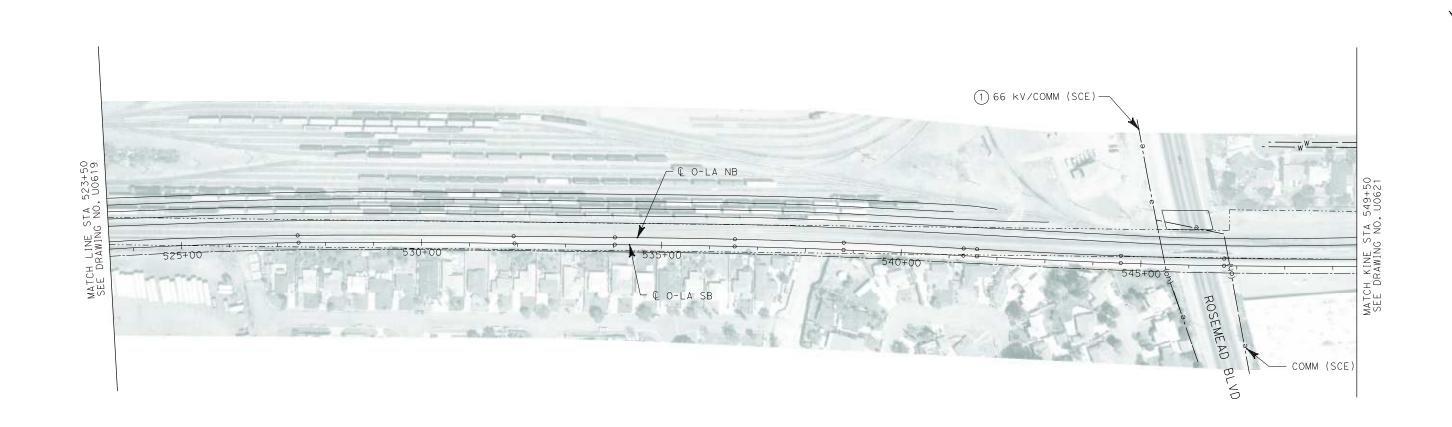
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hZu	REV	DATE	BY	SUB	APP	DESCRIPTION	D. THOMSON DATE





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO.
HSR06-0005
DRAWING NO.
U0619
SCALE
1'' = 100'
SHEET NO.
133 OF 245



No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	SCE	ELECTRICAL	66Kv/COMM	ROSEMEAD BLVD	THE EXISTING POWER POLE IS IN CONFLICT WITH THE PROPOSED WIDENING OF ROSEMEAD BLVD BRIDGE.	HIGH COST RELOCATION	



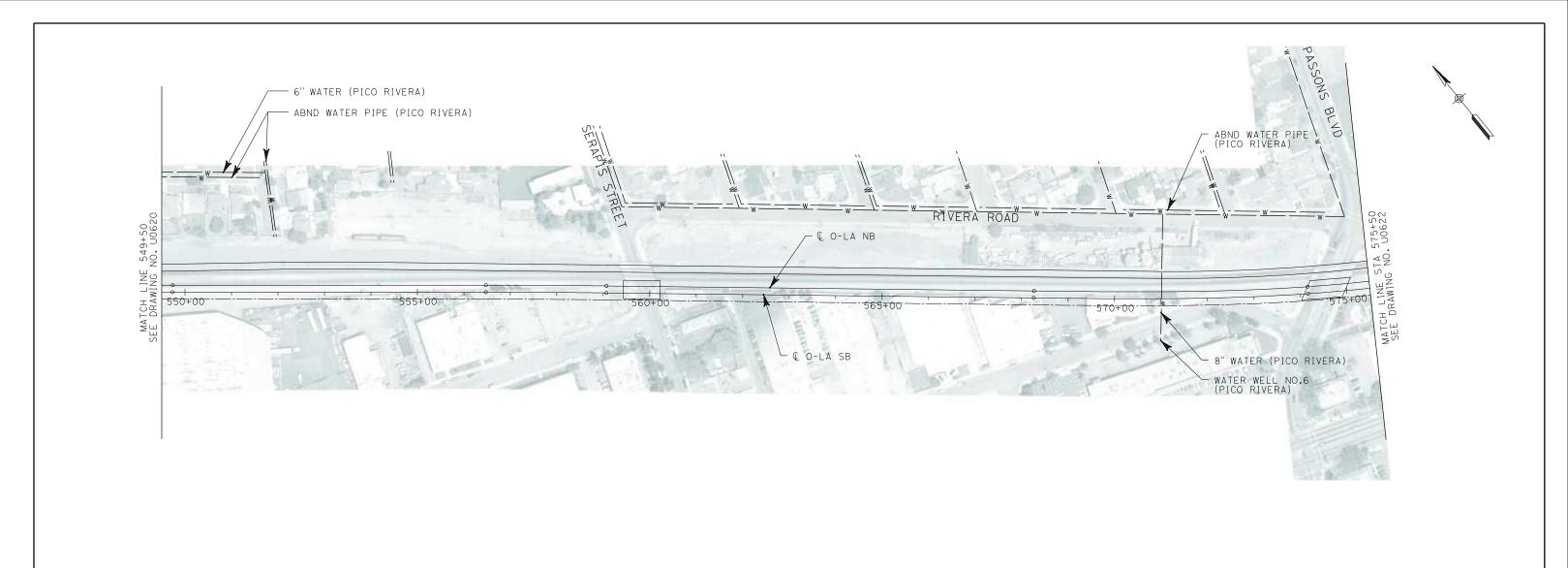
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ZW							D. THOMSON
ohn	REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
DRAWING NO.
U0620
SCALE
1" = 100'
SHEET NO.
134 OF 245



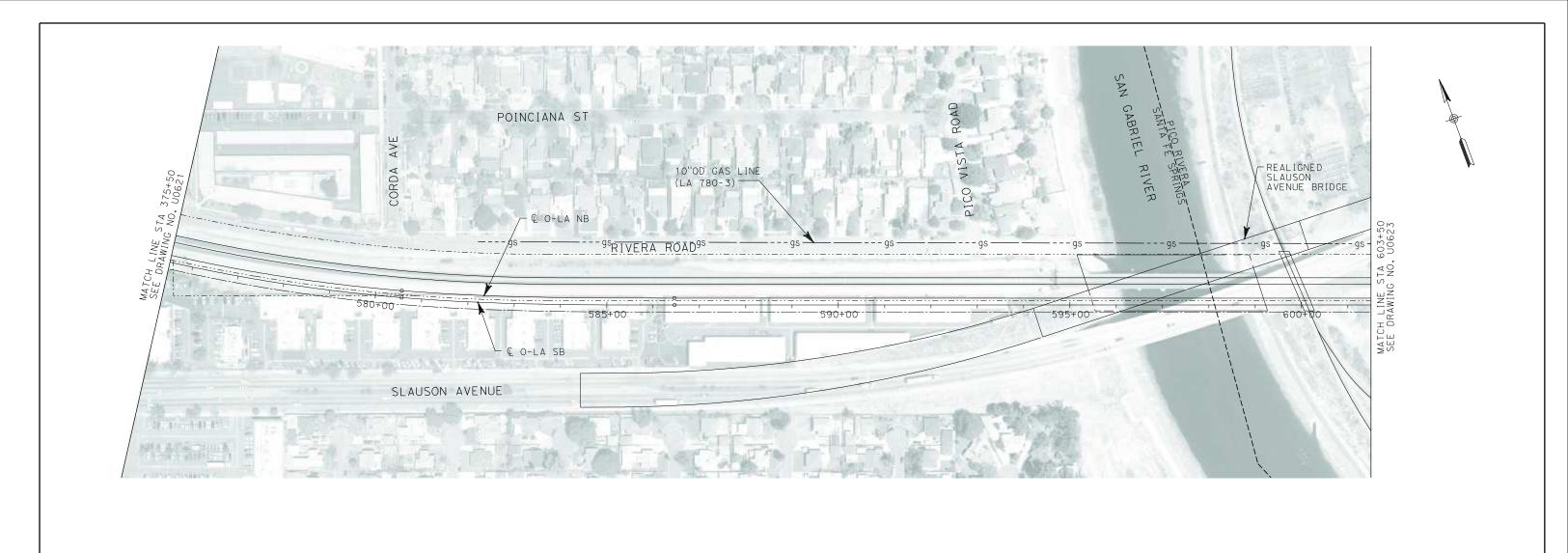






CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
DRAWING NO.
U0621
SCALE
1" = 100'
SHEET NO. 135 OF 245





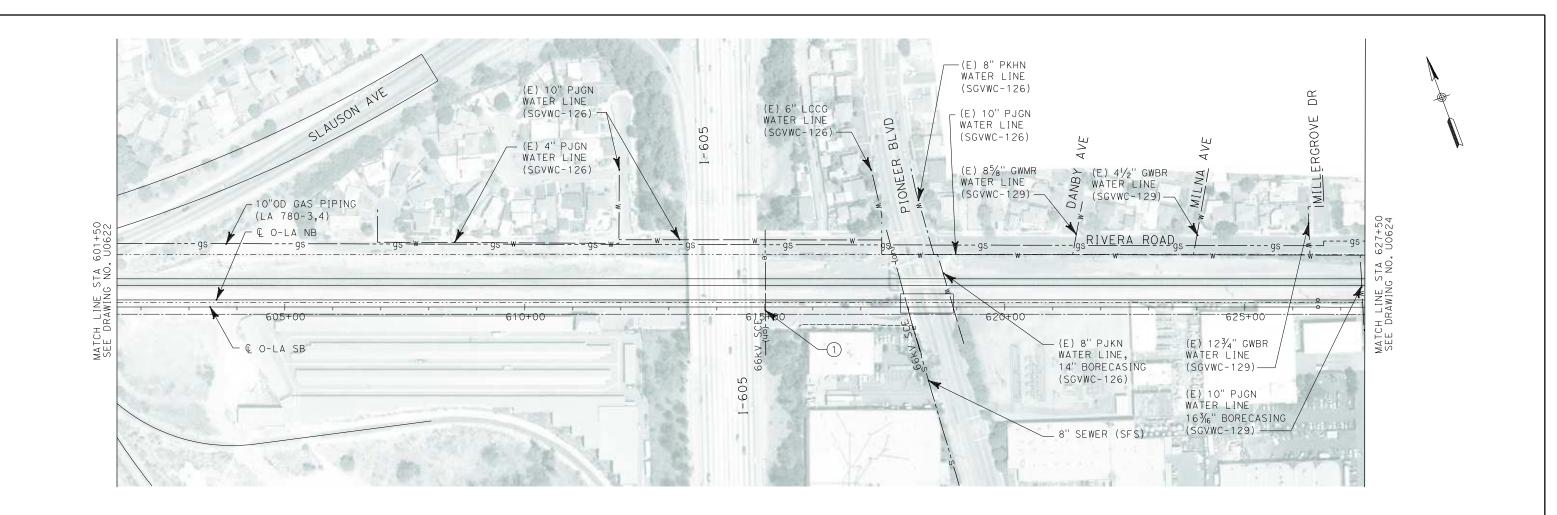
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ohnzm	REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09	ı





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO.
HSR06-0005
DRAWING NO.
U0622
SCALE
1" = 100'
SHEET NO.
136 OF 245



No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	SCE	ELECTRICAL	66Kv/COMM	I-605	THE PROPOSED STRUCTURE FOR THE O-LA TRACKS IS IN CONFLICT WITH THE EXISTING POWER POLE.	HIGH COST RELOCATION	



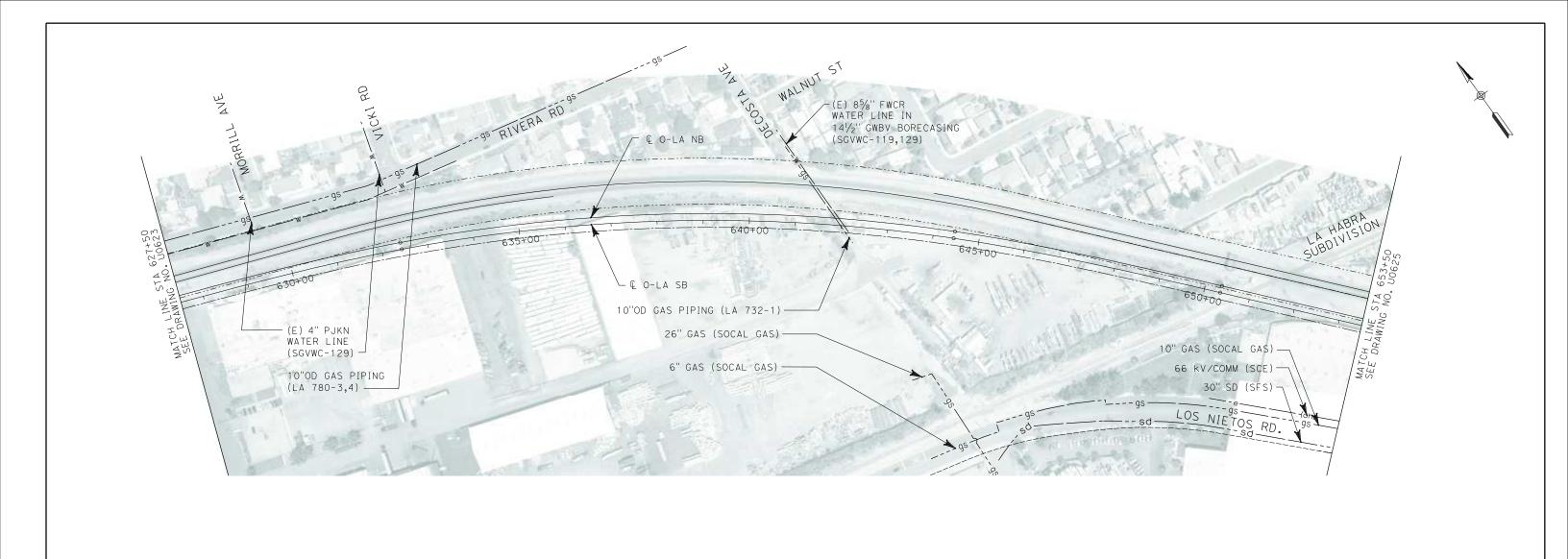
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						CHECKED BY
						M. SATISH IN CHARGE
						D. THOMSON
REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO.
HSR06-0005
DRAWING NO.
U0623
SCALE
1" = 100'
SHEET NO.
137 OF 245





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CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

Γ	CONTRACT NO. HSR06-0005
	DRAWING NO. U0624
	1" = 100'
	SHEET NO. 138 OF 245

No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	SCE	ELECTRICAL	66Kv/COMM	STA 666+22 TO STA 666+65	THE EXISTING OVERHEAD ELECTRICAL LINES ARE CROSSING THE PROPOSED O-LA TRACKS.THE EXISTING TRACKS ARE LOWER THAN THE PROPOSED TRACKS. DUE TO THE ELEVATION OF PROPOSED TRACKS, THE OVERHEAD LINES DO NOT MEET THE MINMUM CRITERIA FOR VERTICAL CLEARANCE.	HIGH COST RELOCATION	
2	SCE	ELECTRICAL	66Kv/COMM	STA 666+65 TO STA 669+52	THE EXISTING OVERHEAD ELECTRICAL LINES ARE TOO CLOSE TO THE PROPOSED O-LA TRACKS.	HIGH COST RELOCATION	
3	SANTA FE SPRINGS	WATER	12' WATER	STA 678+08	THE WATER LINE WILL NEED TO BE ENCASED BACAUSE THE EXISTING AND THE PROPOSED O-LA TRACKS ARE IN THE SAME ELEVATION.	LOW RISK	



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CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

6" GAS (SOLCAL GAS) -

CONTRACT NO. HSR06-0005
DRAWING NO.
U0625
SCALE
1" = 100'
SHEET NO. 139 OF 245

No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	SCE	ELECTRICAL	OOK V / COIVIN		THE EXISTING OVERHEAD ELECTRICAL LINES ARE TOO CLOSE TO THE NB O-LA PROPOSED TRACK	HIGH COST RELOCATION	
2	EXXON MOBIL	OIL	8" ABND OIL PIPELINE	314 033100	THE EXISTING OIL LINE WILL NEED TO BE ENCASED BECAUSE THE THE EXISTING AND THE PROPOSED O-LA TRACKS ARE IN THE SAME ELEVATION.	HIGH RISK	



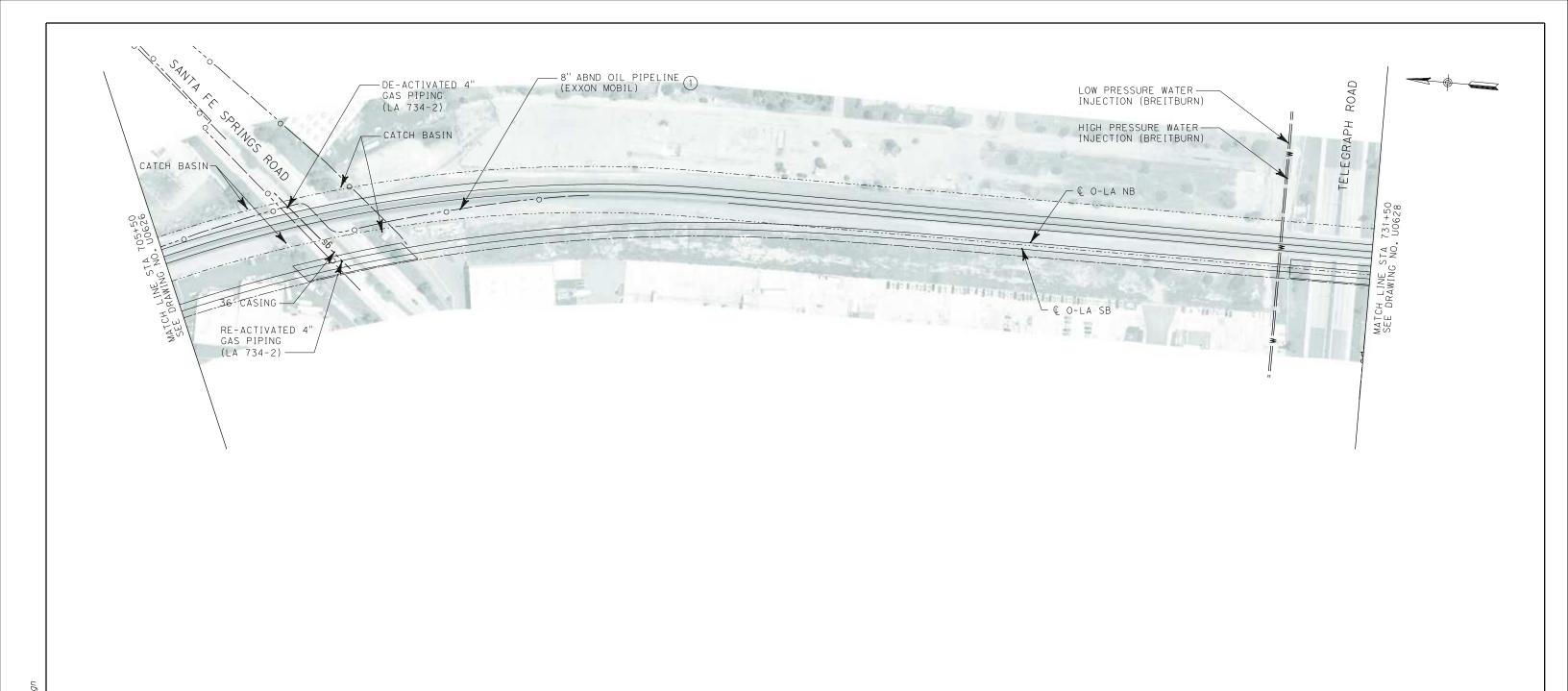
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CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

APHIC SCALE					
T	CONTRACT NO. HSR06-0005				
	DRAWING NO. U0626				
	1" = 100'				
	SHEET NO. 140 OF 245				





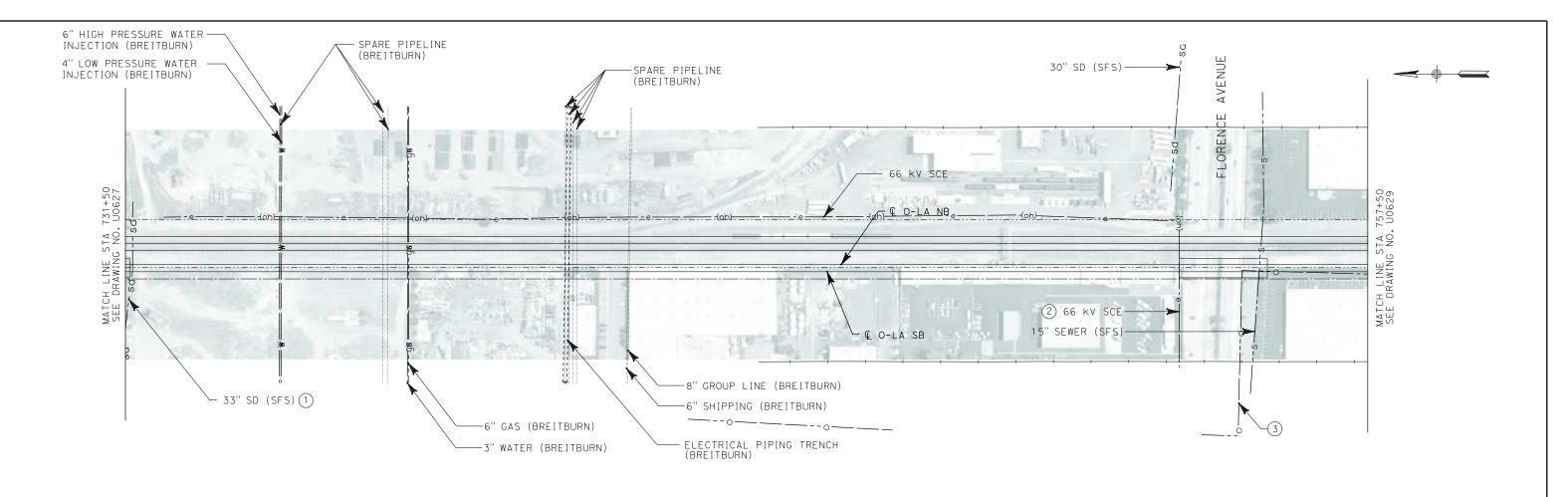
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2							CHECKED BY M. SATISH	
3							IN CHARGE D. THOMSON	
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CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSRO6-0005
DRAWING NO. U0627
1'' = 100'
SHEET NO. 141 OF 245



No	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	CITY OF SANTA FE SPRINGS	STORM DRAIN	33" SD	STA 731+50	THE EXISTING STORM DRAIN LINE IS IN CONFLICT WITH THE PROPOSED BRIDGE OVER TELEGRAPH ROAD.	HIGH COST RELOCATION	
2	SCE	ELECTRICAL	66 kV	FLORENCE AVE	THE EXISTING POWER POLE IS IN CONFLICT DUE TO THE WIDENING OF THE FLORENCE AVE BRIDGE.	HIGH COST RELOCATION	
3	EXXON MOBIL	OIL	8" ABND OIL PIPELINE	STA 755+00 TO STA 757+00	THE EXISTING OIL LINE WILL NEED TO BE ENCASED BECAUSE THE THE EXISTING AND THE PROPOSED O-LA TRACKS ARE IN THE SAME ELEVATION.	HIGH RISK	



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						CHECKED BY
						M. SATISH IN CHARGE
						D. THOMSON
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CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
DRAWING NO. U0628
1'' = 100'
SHEET NO. 142 OF 245

No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	SC GAS ANAHEIM	GAS	6" M C.P.	LAKELAND ROAD	THE GAS LINE IS IN CONFLICT DUE TO THE WIDENING OF THE LAKELAND BRIDGE	HIGH RISK	
2	SHELL OIL PIPELINES - SFS	OIL	3" GASOLINE PIPELINE	LAKELAND ROAD	THE WATER LINE IS IN CONFLICT DUE TO THE WIDENING OF THE LAKELAND BRIDGE	HIGH RISK	
3	CITY OF SANTA FE SPRINGS	STORM DRAIN	48" STROM DRAIN	STA 765+00	THE STORM DRAIN LINE NEED TO BE ENCASED BECAUSE THE EXISTING AND PROPOSED O-LA TRACKS ARE IN THE SAME ELEVATION	HIGH COST RELOCATION	



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						DRAWN BY
						CHECKED BY
						M. SATISH IN CHARGE
						D. THOMSON DATE
REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

	CONTRACT NO.						
	HSR06-0005						
	DRAWING NO. U0629						
	SCALE						
	1" = 100'						
	SHEET NO.						
	143 OF 245						





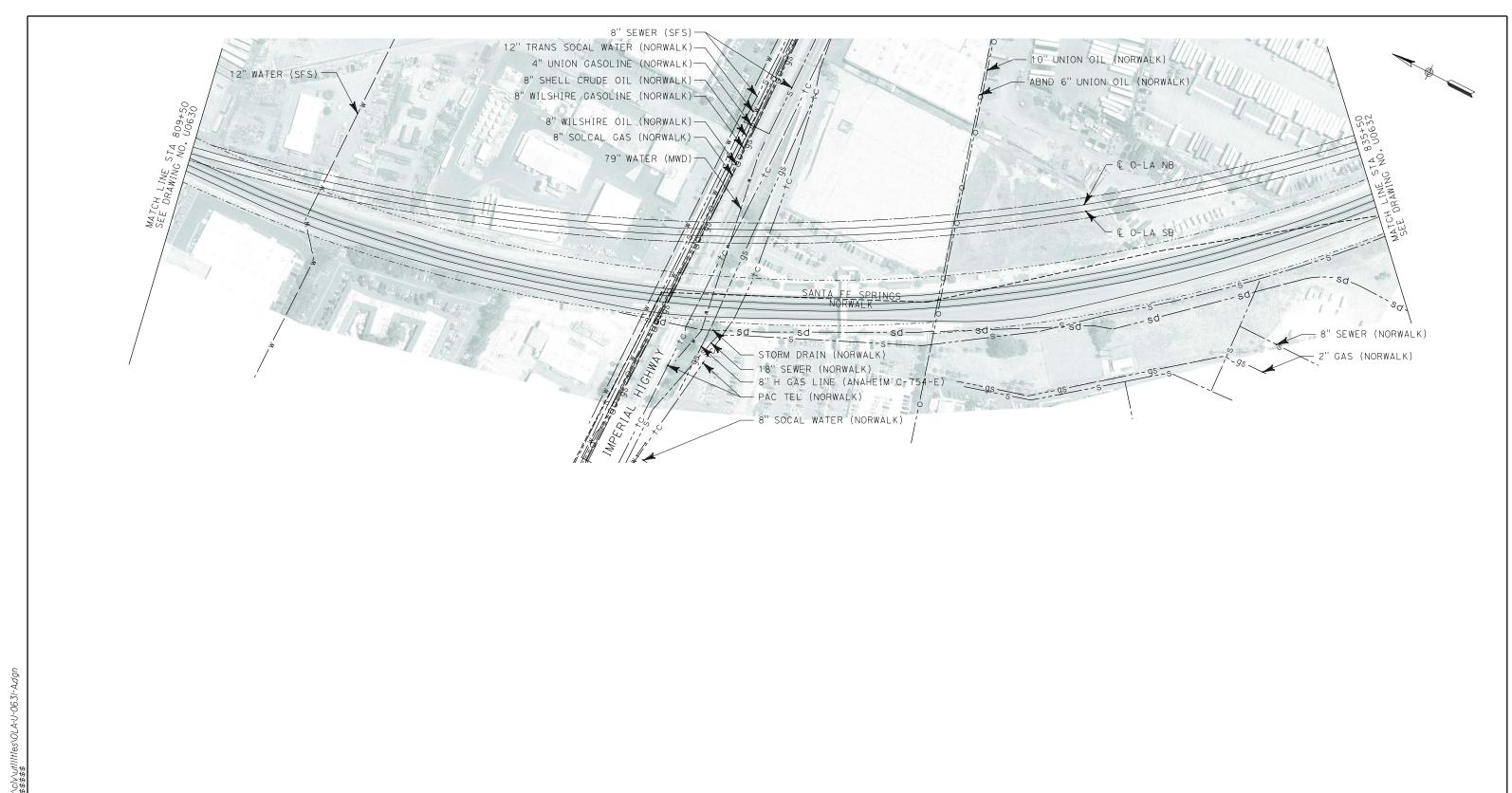


CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

EXISTING COMPOSITE UTILITIES PLAN

CONTRACT NO. HSR06-0005							
1131100 0003							
DRAWING NO.							
U0630							
SCALE							
1" = 100'							
SHEET NO.							
144 OF 245							

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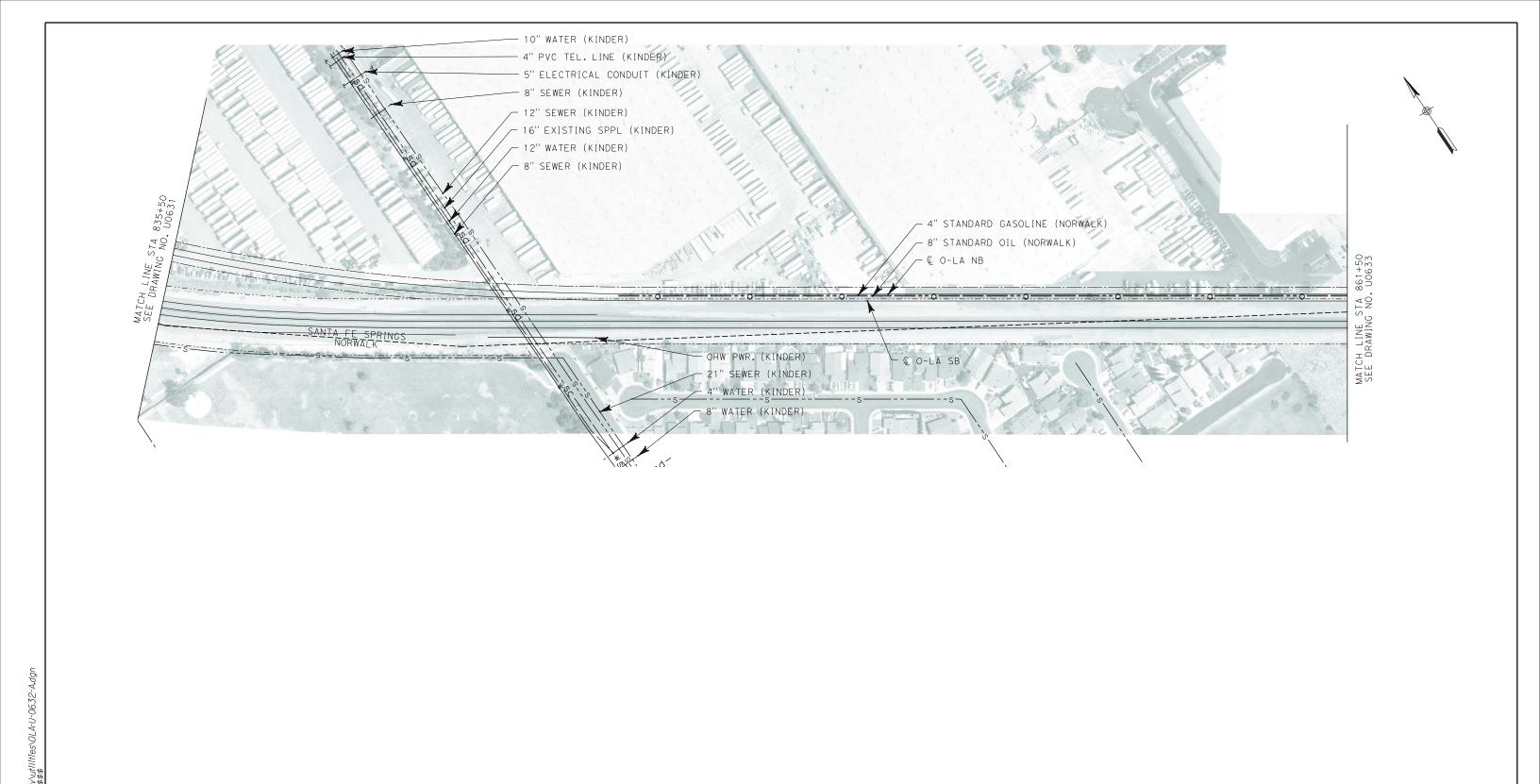
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CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO.								
HSR06-0005								
DRAWING NO.								
U0631								
SCALE								
1'' = 100'								
SHEET NO.								
145 OF 245								





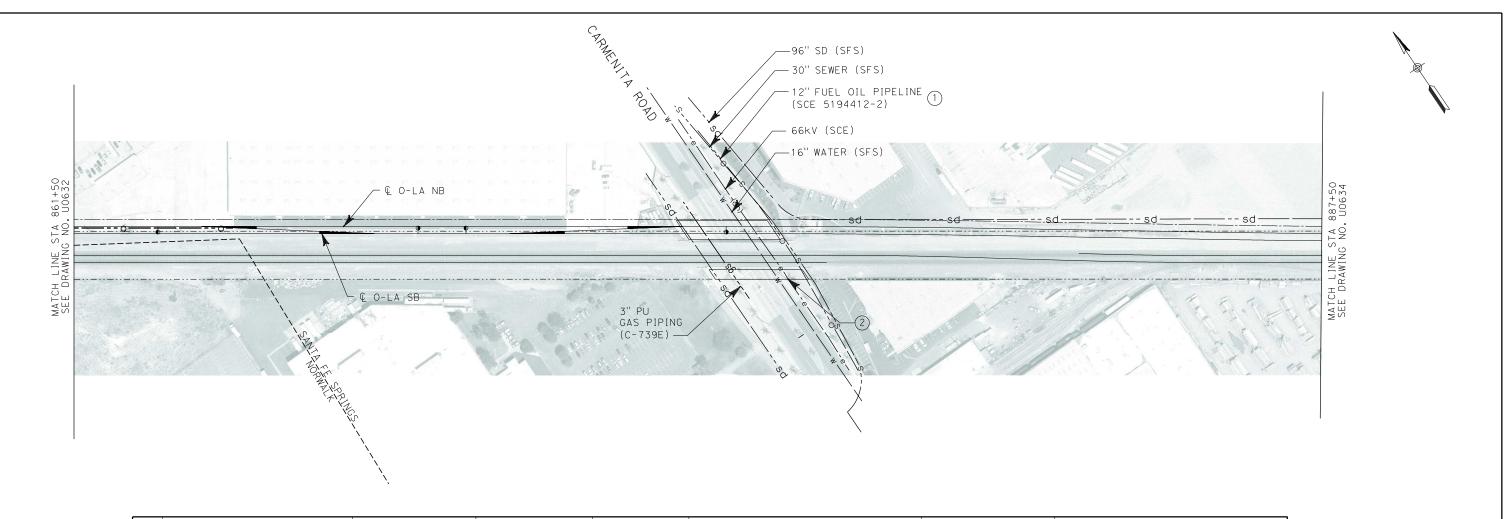
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CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO.							
HSR06-0005							
DRAWING NO.							
U0632							
SCALE							
1" = 100'							
SHEET NO.							
146 OF 245							



N	. COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
(1	EXXON MOBIL	OIL	12" OIL PIPELINE	CARMENTIA ROAD	THE EXISTING OIL PIPELINE IS IN CONFLICT WITH THE PROPOSED WIDENING OF THE BRIDGE	HIGH RISK	
(2	SCE	ELECTRICAL	66 kV	CARMENTIA ROAD	THE EXISTING POWER POLE IS IN CONFLICT DUE TO THE WIDENING OF THE BRIDGE.	HIGH COST RELOCATION	



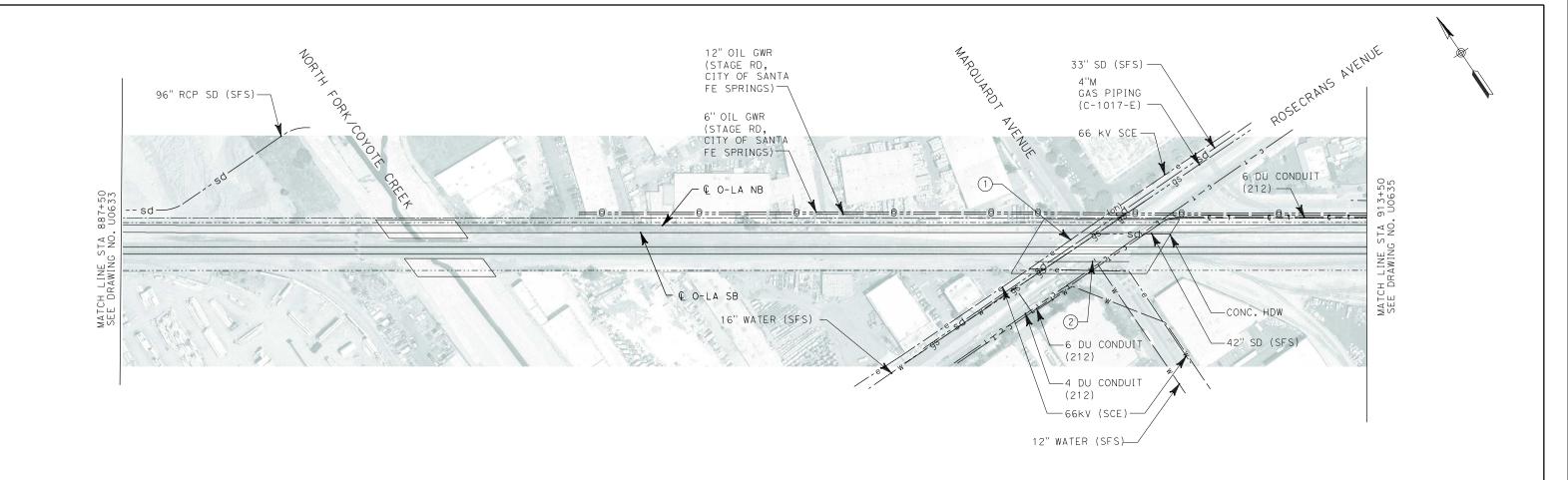
						L. HOROWITZ
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						CHECKED BY
						M. SATISH
						IN CHARGE D. THOMSON
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CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005					
DRAWING NO. U.O.6.3.3					
SCALE 1" = 100'					
SHEET NO. 147 OF 245					



No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	EXXON MOBILE	OIL	12" OIL PIPELINE	ROSECRANS AVE.	THE EXISTING OIL PIPELINE IS IN CONFLICT WITH THE PROPOSED WIDENING OF THE BRIDGE	HIGH RISK	
2	SCE	ELECTRICAL	66 kV	ROSECRANS AVE.	THE EXISTING POWER POLE IS IN CONFLICT DUE TO THE WIDENING OF THE BRIDGE	HIGH COST RELOCATION	



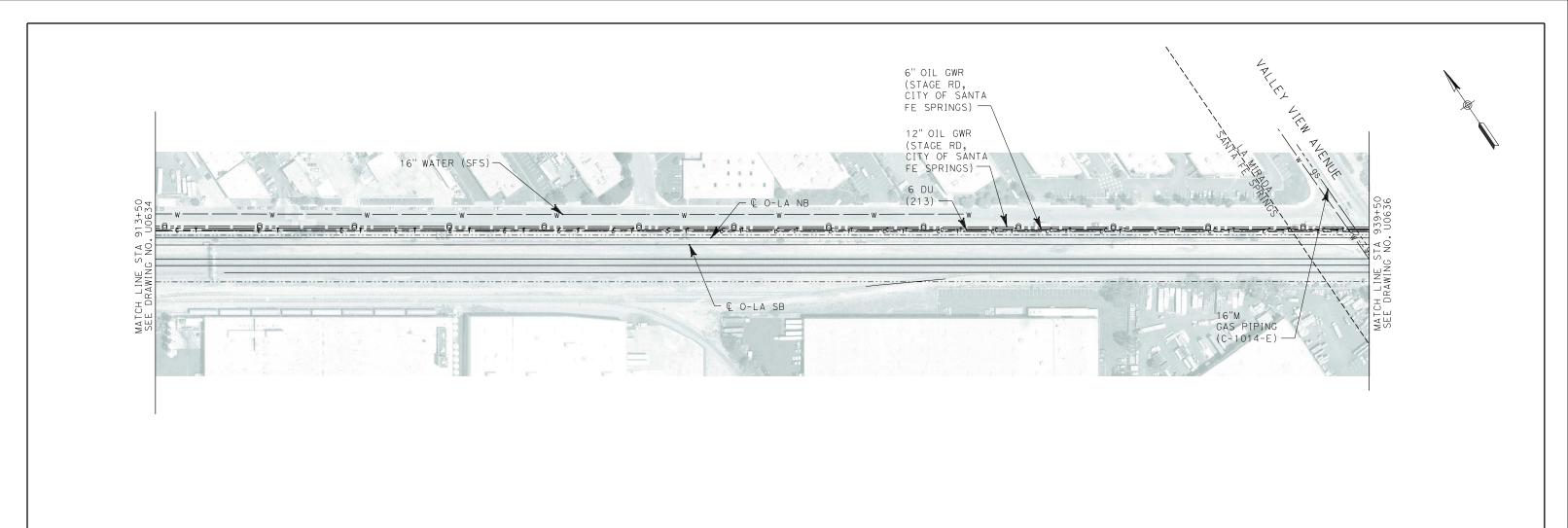
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							M. SATISH IN CHARGE
8							D. THOMSON
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CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
DRAWING NO. U0634
1'' = 100'
SHEET NO. 148 OF 245





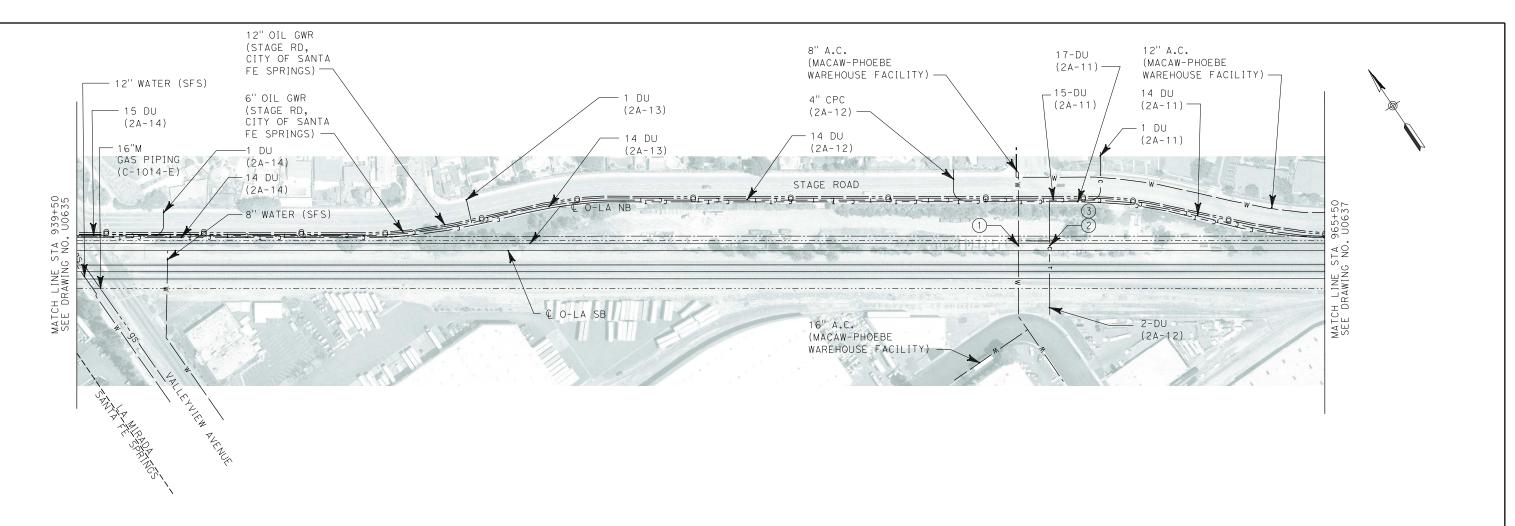
							L. HOROWITZ
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							CHECKED BY
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ZW							D. THOMSON
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CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
1131(00 0003
DRAWING NO.
U0635
SCALE
1" = 100'
SHEET NO.
149 OF 245



No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	WATER L.A.	WATER	8" AC	STA 959+12	THE PROFILE OF THE PROPOSED O-LA TRACKS ARE LOWER THAN EXISTING TRACKS, THEREFORE THE WATER LINE WILL BE IN CONFLICT	LOW RISK	
2	CONDUIT - OC	COMMUNICATION	2-DU		THE PROFILE OF THE PROPOSED O-LA TRACKS ARE LOWER THAN EXISTING TRACKS, THEREFORE THE CABLE-TV LINE WILL BE IN CONFLICT	LOW RISK	
3	CONDUIT - OC	COMMUNICATION	2-DU	STA 959+74 TO STA 959+76	THE CABLE TV LINE IS TOO CLOSE TO THE PROPOSED O-LA NB TRACK	LOW RISK	



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							CHECKED BY
							M. SATISH IN CHARGE
mΖr							D. THOMSON
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CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
DRAWING NO. U0636
1'' = 100'
SHEET NO. 150 OF 245

No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	WATER L.A.	WATER	8" AC	STA 966+20	THE PROFILE OF THE PROPOSED O-LA TRACKS ARE LOWER THAN EXISTING TRACKS, THEREFORE THE WATER LINE WILL BE IN CONFLICT	LOW RISK	
2	CONDUIT - OC	COMMUNICATION	2-DU	LA MIRADA CREEK	THE PROFILE OF THE PROPOSED O-LA TRACKS ARE LOWER THAN EXISTING TRACKS, THEREFORE THE CABLE-TV LINE WILL BE IN CONFLICT	LOW RISK	
3	CONDUIT - OC	COMMUNICATION	2-DU	STA 971+00 TO STA 971+85	THE CABLE TV LINE IS TOO CLOSE TO THE PROPOSED O-LA NB TRACK	LOW RISK	



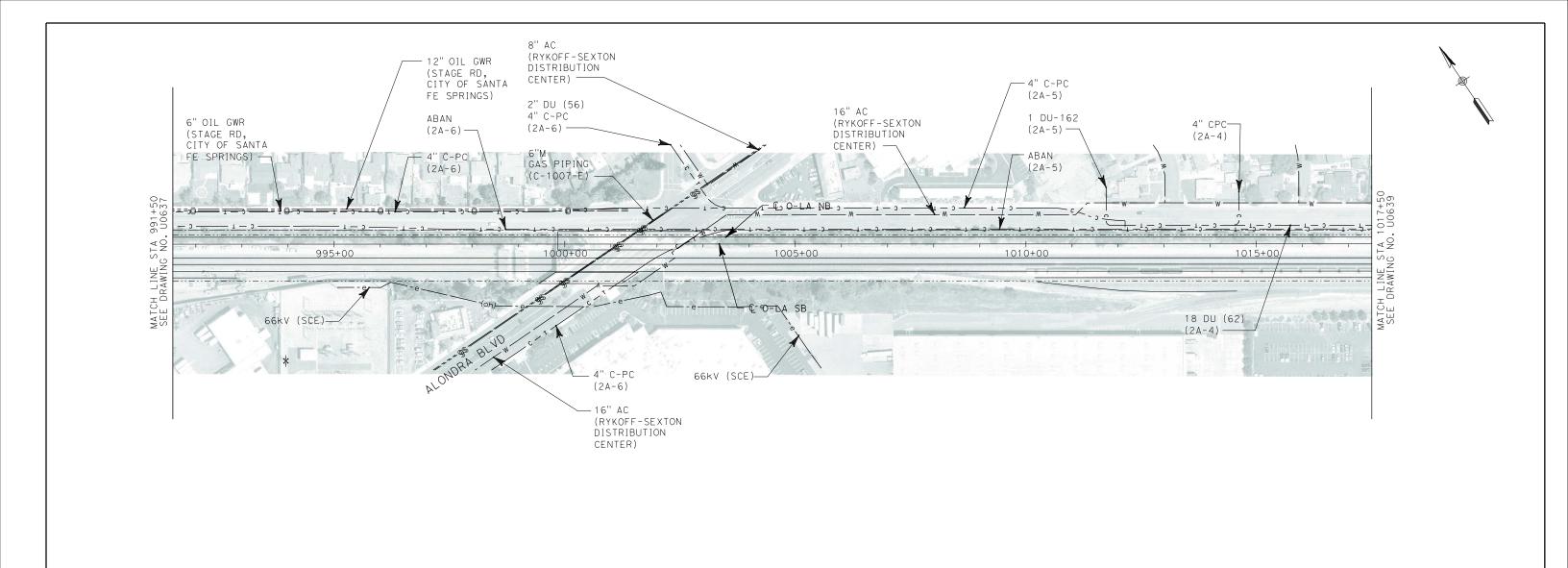
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						DRAWN BY Z. OHN
						CHECKED BY M. SATISH
						IN CHARGE D. THOMSON
REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09

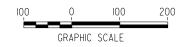




CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
DRAWING NO. U0637
1'' = 100'
SHEET NO. 151 OF 245



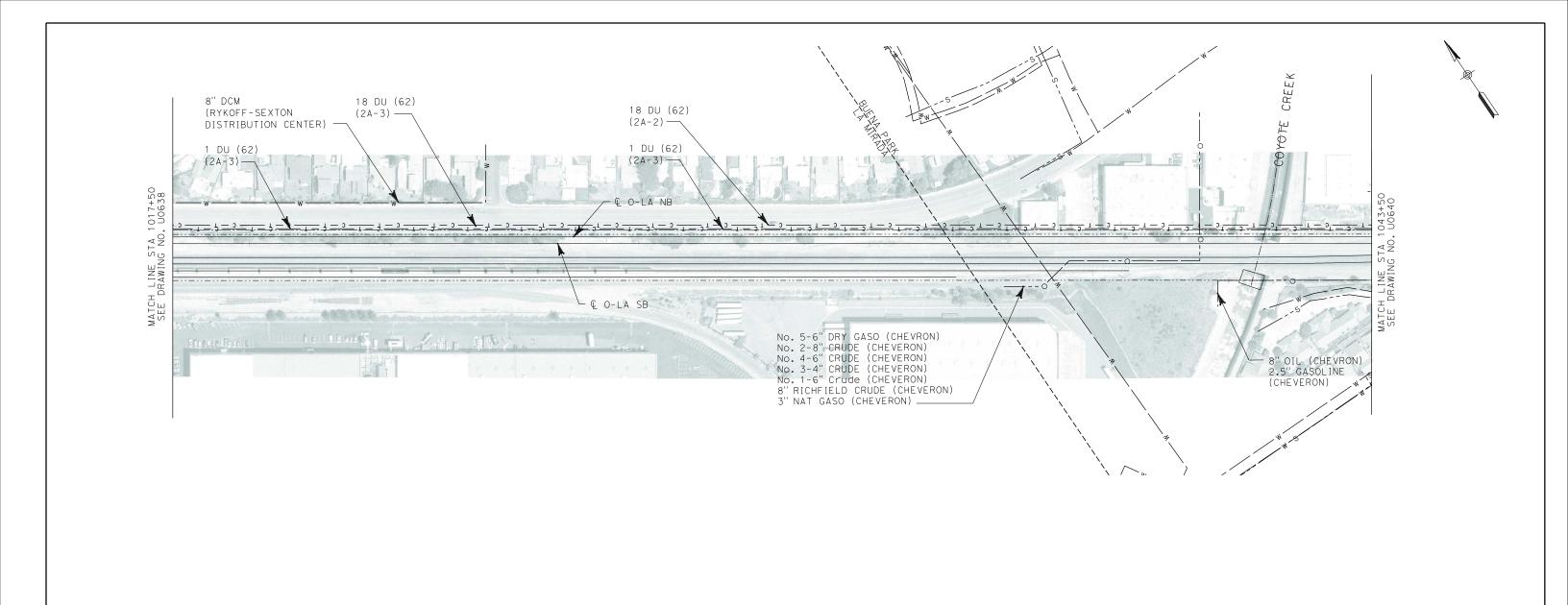






CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
DRAWING NO.
U0638
SCALE
1" = 100'
SHEET NO.
152 OF 245



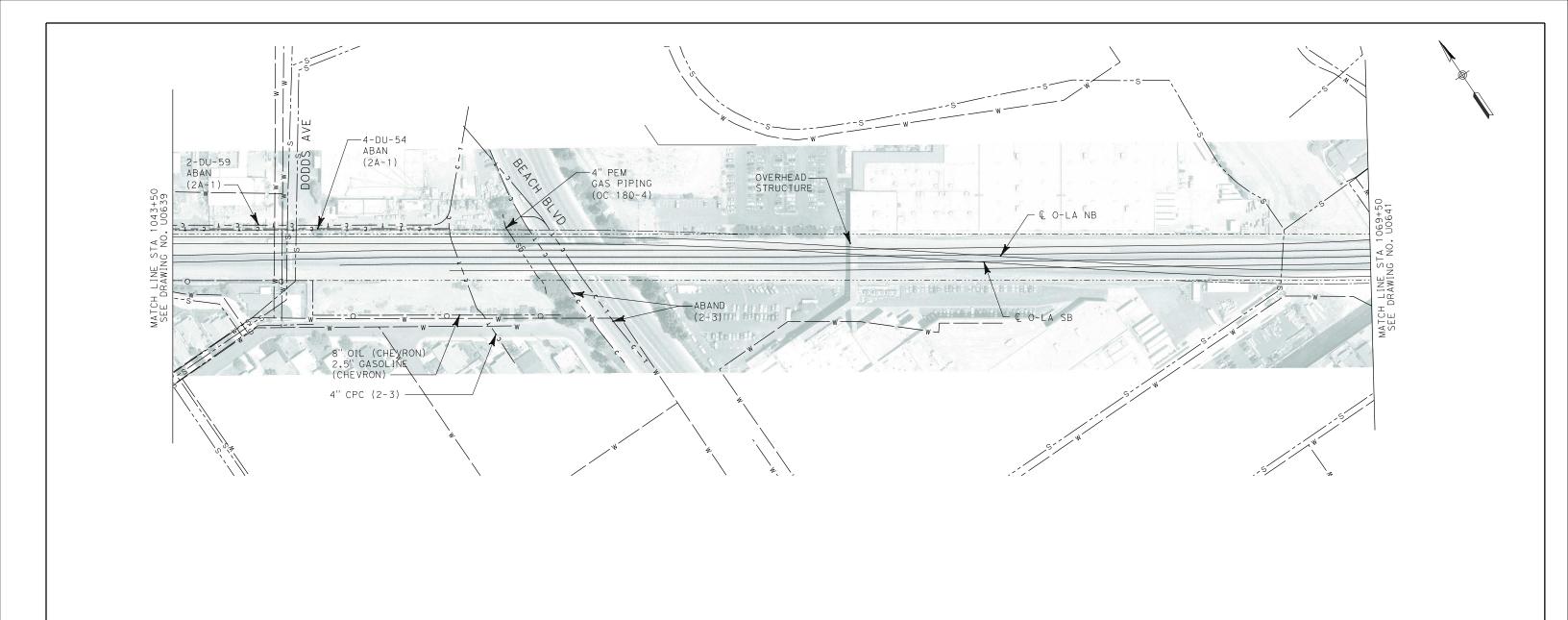






CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
DRAWING NO.
U0639
SCALE
1" = 100'
SHEET NO.
153 OF 245









CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO.
HSR06-0005
DRAWING NO.
U0640
SCALE
1'' = 100'
SHEET NO.
15/ OF 2//5



N	O. COMPANY TYPE O	OF UTILITY DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
	BUENA PARK WATER	12" WATER	DALE STREET	THE EXISTING WATER LINE IS IN CONFLICT DUE TO THE WIDENING OF THE BRIDGE AT DALE STREET	LOW RISK	

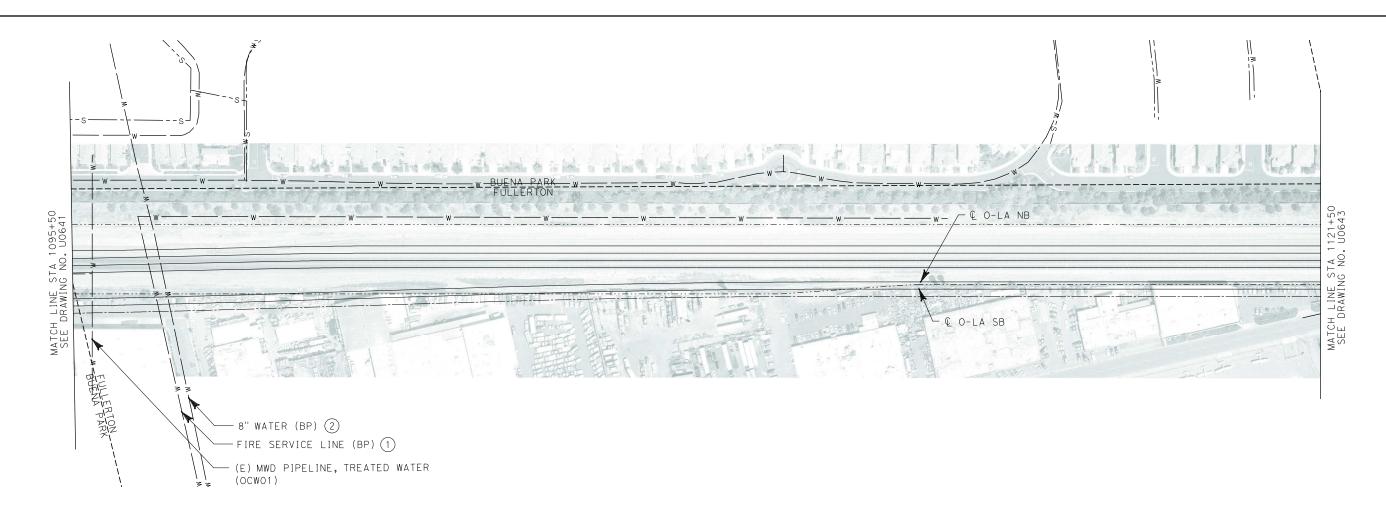






CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO.
HSR06-0005
DRAWING NO.
U0641
SCALE
1'' = 100'
SHEET NO.
155 OF 2/15



No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	BUENA PARK	WATER	8" WATER		THE EXISTING WATER LINE IS IN CROSSING THE PROPOSED TRACKS THEREFORE THE WATER LINE WILL BE ENCASED	LOW RISK	
2	BUENA PARK	WATER	8" WATER		THE EXISTING WATER LINE IS IN CROSSING THE PROPOSED TRACKS THEREFORE THE WATER LINE WILL BE ENCASED	LOW RISK	

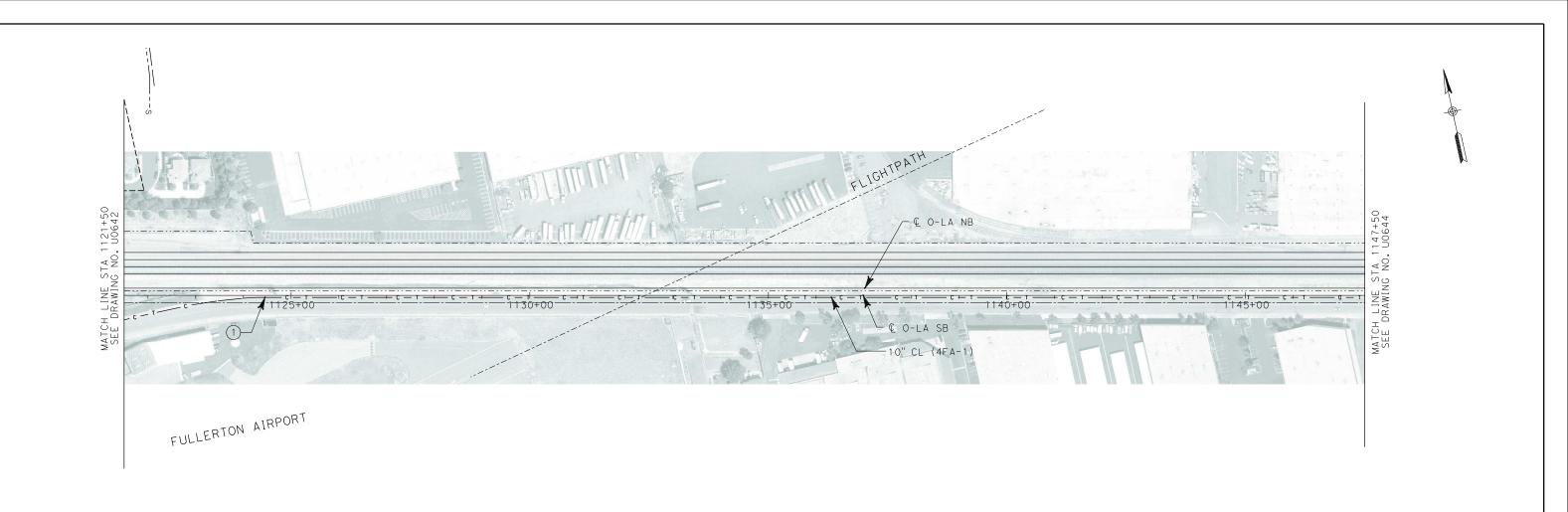






CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO.
HSR06-0005
DRAWING NO.
U0642
SCALE
1" = 100'
SHEET NO.
156 OF 245



No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	CONDUIT - OC	COMMUNICATION	10" CL	STA 1124+00 TO STA 1147+50	THE CABLE TV LINE IS TOO CLOSE TO THE PROPOSED O-LA NB TRACK	LOW RISK	



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						CHECKED BY
						M. SATISH
						IN CHARGE D. THOMSON
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CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
DRAWING NO.
U0643
SCALE
1" = 100'
SHEET NO.
157 OF 245

No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	CONDUIT - OC	COMMUNICATION	4" CPC	GILBERT STREET	THE EXISTING COMMUNICATION LINE IS IN CONFLICT WITH THE WIDENING OF THE BRIDGE AT GILBERT STREET	LOW RISK	
2	CONDUIT - OC	COMMUNICATION		STA 1147+50 TO STA 1150+00	CABLE TV IS TOO CLOSE TO THE PROPOSE TRACKS	LOW RISK	
3	THE GAS COMPANY	GAS	8" H GAS PIPINS	STA 1151+12	THE PROFILE OFF THE PROPOSED O-LA TRACKS ARE LOWER THAN EXISTING TRACKS, THEREFORE THE GAS LINE WILL BE IN CONFLICT.	HIGH RISK	



						DESIGNED BY L. HOROWITZ
<u> </u>						DRAWN BY Z. OHN
						CHECKED BY
						M. SATISH
						IN CHARGE D. THOMSON
REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO.							
HSR06-0005							
DRAWING NO.							
U0644							
SCALE							
1" = 100'							
SHEET NO. 158 OF 245							

No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	SCE	ELECTRICAL	66Kv/COMM	BROOKHURST ROAD	THE EXISTING POWER POLE IS IN CONFLICT DUE TO THE WIDENING OF THE BROOKHURST BRIDGE	HIGH COST RELOCATION	
2	THE GAS COMPANY	GAS	4" H GAS PIPING	BROOKHURST ROAD	THE EXISTING GAS LINE IS CROSSING THE PROPOSED TRACKS THREFORE THEY NEED TO BE ENCASED	LOW RISK	
3	CONDUIT - OC	COMMUNICATION	8 MTD	COMMONWEALTH AVE	THE EXISTING CABLE-TV LINE IS IN CONFLICT DUE TO THE WIDENING OF COMMONWEALTH BRIDGE	LOW RISK	
4	CONDUIT - OC	COMMUNICATION	8 MTD		THE EXISTING CABLE-TV LINE IS CROSSING THE PROPOSED TRACKS THEREFORE THEY NEED TO BE ENCSED	LOW RISK	



mzuuo	REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09
e/N							IN CHARGE D. THOMSON DATE
ŀ							CHECKED BY M. SATISH
-							DRAWN BY Z. OHN
L							L. HOROWITZ





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
DRAWING NO.
U0645
SCALE
1" = 100'
SHEET NO.
159 OF 245

No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	CONDUIT - OC	COMMUNICATION	4-DU	STA 1204+30	THE EXISTING CABLE-TV LINE IS CROSSING THE PROPOSED TRACKS THEREFORE THEY NEED TO BE ENCASED	LOW RISK	



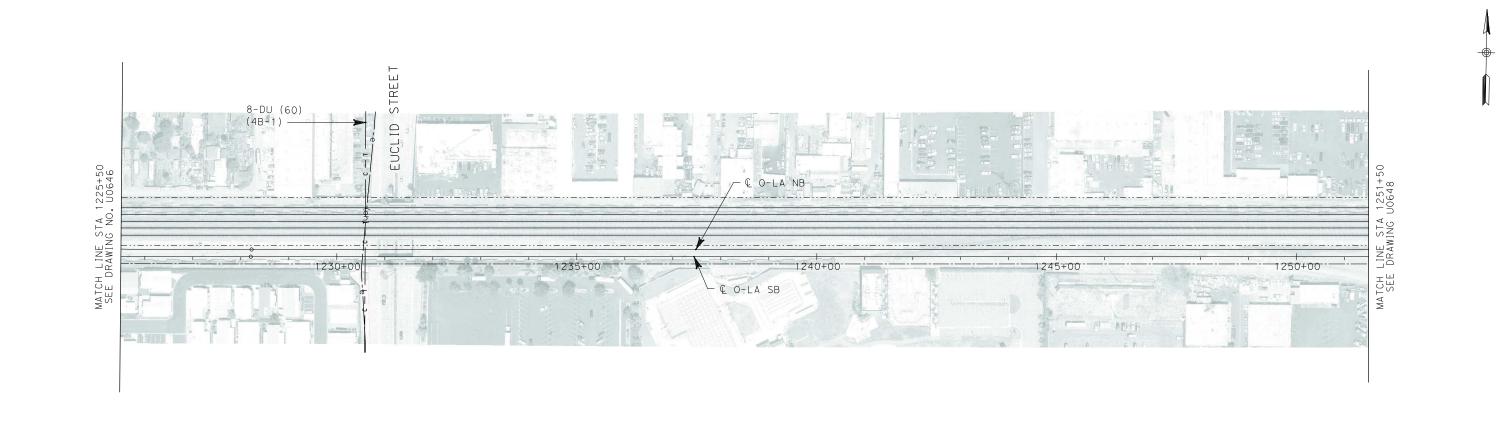
						DESIGNED BY L. HOROWITZ
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						CHECKED BY
						M. SATISH
						D. THOMSON
REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

T	CONTRACT NO. HSR06-0005
	DRAWING NO. U0646
	1'' = 100''
	SHEET NO. 160 OF 245





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CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO.
HSR06-0005
DRAWING NO.
U0647
SCALE
1" = 100'
SHEET NO.
161 OF 245

No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	SCE	ELECTRICAL	4 kV		THE EXISTING OVERHEAD LINES ARE IN CONFLICT WITH THE PROPOSED FULLERTON METROLINK STATION	HIGH COST RELOCATION	
2	SCE	ELECTRICAL	4 kV	STA 1258+35	THE EXISTING OVERHEAD LINES ARE TOO CLOSE TO THE PROPOSED O-LA TRACKS	HIGH COST RELOCATION	



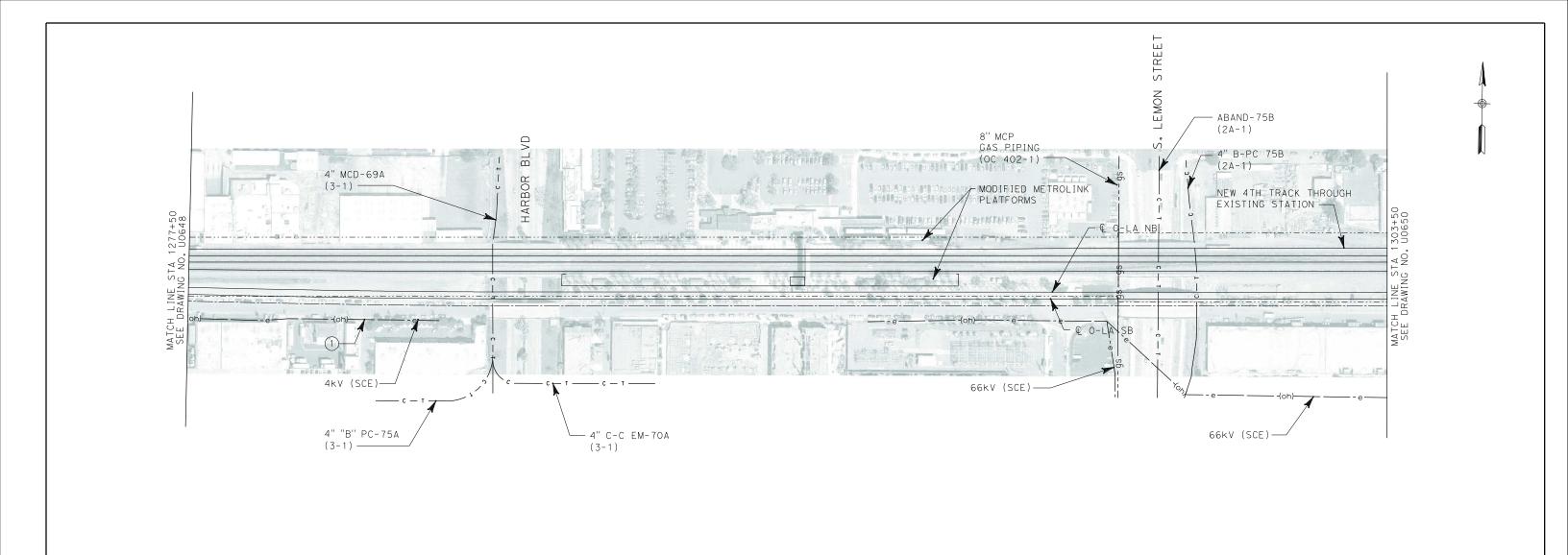
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						M. SATISH
						IN CHARGE D. THOMSON
REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
DRAWING NO. U0648
SCALE 1'' = 100'
SHEET NO. 162 OF 245



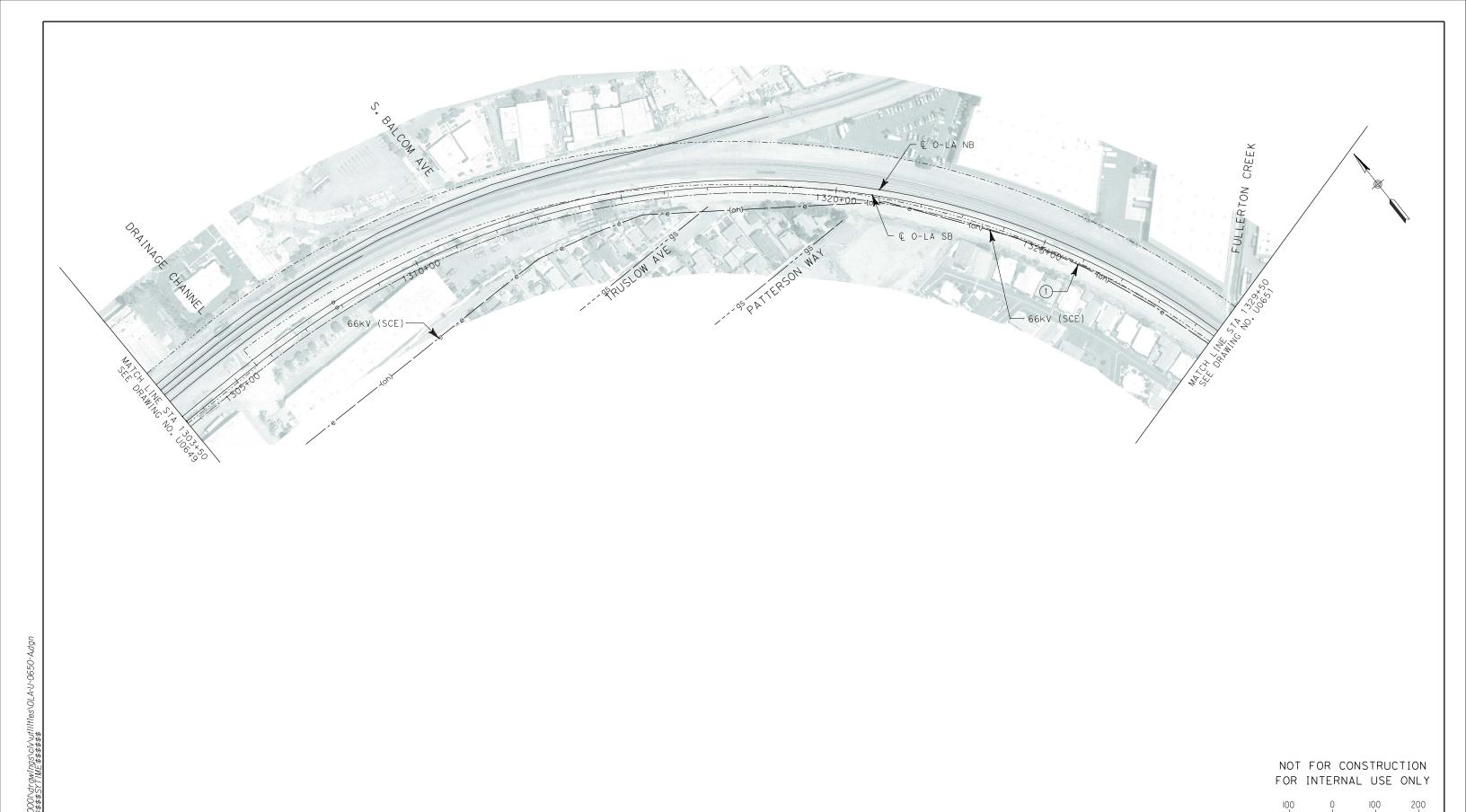






CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
DRAWING NO.
U0649
SCALE
1" = 100'
SHEET NO.
163 OF 245





CALIFORNIA HIGH SPEED RAIL AUTHORITY EX CALIFORNIA Without ever leaving the ground.

CALIFORNIA HIGH SPEED TRAIN PROJEC ORANGE COUNTY TO LOS ANGELES

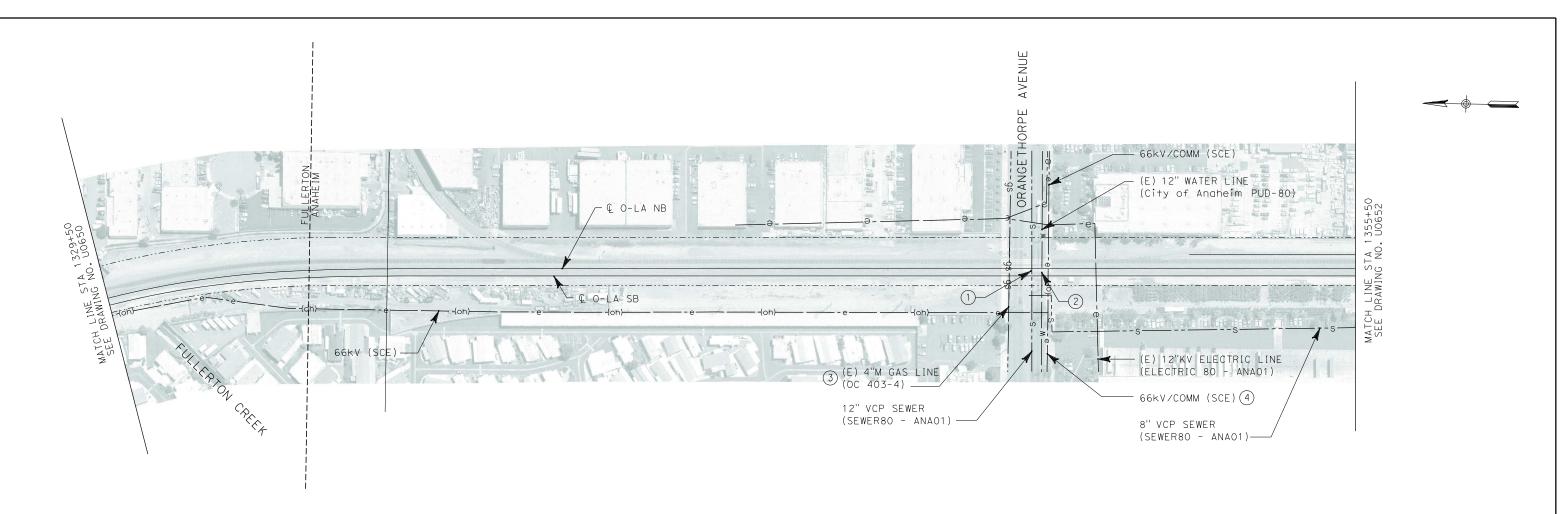
EXISTING COMPOSITE UTILITIES PLAN

T	CONTRACT NO. HSR06-0005
	DRAWING NO. U0650
	1'' = 100'
	SHEET NO. 164 OF 245

GRAPHIC SCALE

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No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	SEWER ANAHEIM	SEWER	12" VCP		THE EXISTING SEWER LINE IS IN CONFLICT BECAUSE THE ORANGETHORPE WILL BE GRADE SEPARATED	LOW RISK	
2	CITY OF ANAHEIM	WATER	12" WATER LINE	ORANGETHORPE AVE	THE ADDITION OF THE PROPOSED O-LA TRACKS ASIDE THE EXISTING TRACKS, MIGHT CONFLICT WITH THE WATER LINE	LOW RISK	
3	THE GAS COMPANY	GAS	4" M GAS	ORANGETHORPE AVE	THE EXISTING GAS LINE IS IN CONFLICT BECAUSE THE ORANGETHROPE WILL BE GRADE SEPARATED	LOW RISK	
4	SCE	ELECTRICAL	66 kV		THE EXISTING OVERHEAD LINE IS IN CONFLICT BECAUSE THE ORANGETHROPE WILL BE GRADE SEPARATED	HIGH COST RELOCATION	



						DESIGNED BY L. HOROWITZ
						DRAWN BY Z. OHN
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						IN CHARGE D. THOMSON
Z REV	DATE	BY	SUB	APP	DESCRIPTION	DATE 02-13-09





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
H3K06-0003
DRAWING NO.
U0651
SCALE
1" = 100'
SHEET NO. 165 OF 245

No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	CITY OF ANAHEIM	SEWER	8" VCP		THE EXISTING SEWER LINE IS CROSSING THE PROPOSED TRACKS THEREFORE NEED TO BE ENCASED	LOW RISK	







CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

Γ	CONTRACT NO. HSR06-0005
	DRAWING NO. U0652
	1" = 100'
	SHEET NO. 166 OF 245

No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	SEWER ANAHEIM	SEWER	8" VCP	LA PALMA AVE	THE EXISTING SEWER LINE IS CROSSING THE PROPOSED TRACKS THREFORE NEED TO BE ENCASED	LOW RISK	
2	CITY OF ANAHEIM	WATER	12" WATER LINE	LA PALMA AVE	THE EXISTING SEWER LINE IS CROSSING THE PROPOSED TRACKS THREFORE NEED TO BE ENCASED	LOW RISK	
3	CITY OF ANAHEIM	WATER	18" WATER LINE	LA PALMA AVE	THE EXISTING WATER LINE IS IN CONFLICT BECAUSE LA PALMA AVE WILL BE GRADE SEPARATED	LOW RISK	
4	CITY OF ANAHEIM	SEWER	18" VCP	LA PALMA AVE	THE EXISTING SEWER LINE IS IN CONFLICT BECAUSE LA PALMA AVE WILL BE GRADE SEPARATED	LOW RISK	
(5)	THE GAS COMPANY	GAS	30" Н	LA PALMA AVE	THE EXISTING GAS LINE IS IN CONFLICT BECAUSE LA PALMA AVE WILL BE GRADE SEPARATED	HIGH RISK	
6	CITY OF ANAHEIM	SEWER	10" VCP	LA PALMA AVE	THE EXISTING SEWER LINE IS IN CONFLICT BECAUSE LA PALMA AVE WILL BE GRADE SEPARATED	LOW RISK	
7	CITY OF ANAHEIM	ELECTRICAL	12" kV ELECTRICAL LINE	LA PALMA AVE	THE EXISTING ELECTRICAL LINE IS IN CONFLICT BECAUSE LA PALMA AVE WILL BE GRADE SEPARATED	LOW RISK	
8	OCFCD - CARBON CREEK	STORM DRAIN	FLOOD CONTROL CHANNEL	LA PALMA AVE	EXISTING CHANNEL IS IN CONFLICT BECAUSE LA PALMA AVE WILL BE GRADE SEPARATED	LOW RISK/HIGH RISK	



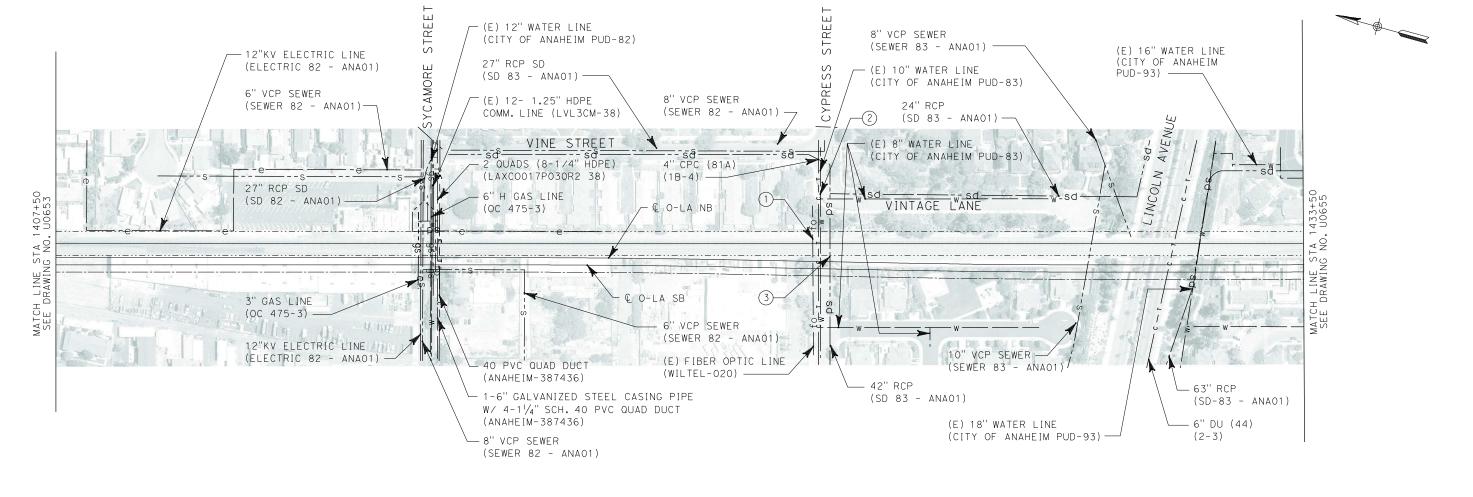
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REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
DRAWING NO.
U0653
SCALE
1" = 100'
SHEET NO.
167 OF 245



No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	CONDUIT - OC	COMMUNICATION	FIBER OPTIC	CYPRESS STREET	THE EXISTING FIBER OPTIC LINE IS CROSSING THE PROPOSED TRACKS, THEREFORE NEED TO BE ENCASED	LOW RISK	
2	CITY OF ANAHEIM	WATER	10" WATER LINE	CYPRESS STREET	THE EXISTING WATER LINE IS CROSSING THE PROPOSED TRACKS, THEREFORE NEED TO BE ENCASED	LOW RISK	
3	CITY OF ANAHEIM	STORM DRAIN	42" RCP	CYPRESS STREET	THE EXISTING STORM DRAIN IS CROSSING THE PROPOSED TRACKS, THEREFORE NEED TO BE ENCASED	HIGH COST RELOCATION	



						DESIGNED BY L. HOROWITZ
						DRAWN BY Z. OHN
						CHECKED BY
						M. SATISH
						D. THOMSON
REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09

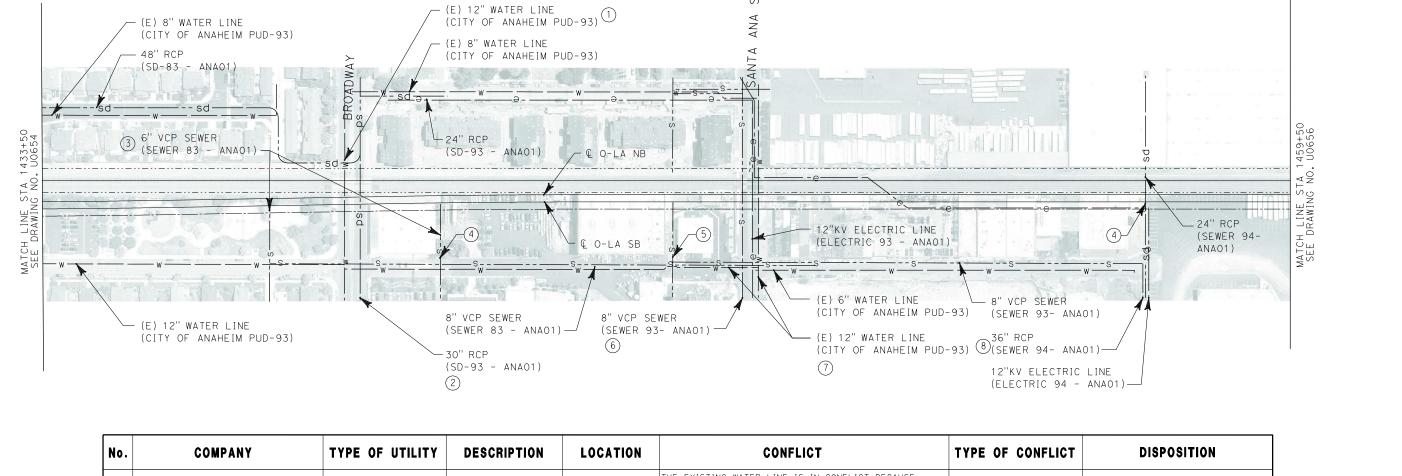




CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
DRAWING NO. U0654
SCALE
1" = 100'
SHEET NO. 168 OF 245





No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	CITY OF ANAHEIM	WATER	12" WATER	BROADWAY STREET	THE EXISTING WATER LINE IS IN CONFLICT BECAUSE BROADWAY STREET WILL BE GRADE SEPARATED	LOW RISK	
2	CITY OF ANAHEIM	STORM DRAIN	30" STROM DRAIN	BROADWAY STREET	THE EXISTING STORM DRAIN IS IN CONFLICT BECAUSE BROADWAY STREET WILL BE GRADE SEPARATED	LOW RISK	
3	CITY OF ANAHEIM	SEWER	6" VCP SEWER	STA 1438+20	THE EXISTING SEWER LINE IS CROSSING THE PROPOSED TRACKS THEREFORE WILL NEED TO BE ENCASED	LOW RISK	
4	CITY OF ANAHEIM	SEWER	6" VCP SEWER	STA 1441+77	THE EXISTING SEWER LINE IS CROSSING THE PROPOSED TRACKS THEREFORE WILL NEED TO BE ENCASED	LOW RISK	
(5)	CITY OF ANAHEIM	SEWER	6" VCP SEWER	STA 1446+63	THE EXISTING SEWER LINE IS CROSSING THE PROPOSED TRACKS THEREFORE WILL NEED TO BE ENCASED	LOW RISK	
6	CITY OF ANAHEIM	SEWER	8" VCP SEWER	SANTA ANA STREET	THE EXISTING SEWER LINE IS CROSSING THE PROPOSED TRACKS THEREFORE WILL NEED TO BE ENCASED	LOW RISK	
7	CITY OF ANAHEIM	WATER	12" WATER	SANTA ANA STREET	THE EXISTING WATER LINE IS CROSSING THE PROPOSED TRACKS THEREFORE WILL NEED TO BE ENCASED	LOW RISK	
8	CITY OF ANAHEIM	STORM DRAIN	36" RCP	STA 1456+88	THE EXISTING STORM DRAIN LINE IS CROSSING THE PROPOSED TRACKS THEREFORE WILL NEED TO BE ENCASED	LOW RISK	



						DESIGNED BY
						DRAWN BY
						CHECKED BY
						M. SATISH IN CHARGE
						D. THOMSON
REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
DRAWING NO.
U0655
SCALE
1" = 100'
SHEET NO.
169 OF 245

No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	MWD	WATER	TREATED WATER LINE	STA 1470+00	THE EXISTING WATER LINE IS CROSSING THE PROPOSED TRACKS THEREFORE NEED TO BE ENCASED	LOW RISK	
2	THE GAS COMPANY	GAS	4" GAS	\/	THE EXISTING STORM DRAIN LINE IS IN CONFLICT BECAUSE VERMONT AVE WILL BE GRADE SEPARATED	LOW RISK	
3	CITY OF ANAHEIM	STORM DRAIN	90" RCP	I VEDMONII AVE	THE EXISTING STORM DRAIN LINE IS IN CONFLICT BECAUSE VERMONT AVE WILL BE GRADE SEPARATED	HIGH COST RELOCATION	
4	CITY OF ANAHEIM	WATER	16" WATER		THE EXISTING STORM DRAIN LINE IS IN CONFLICT BECAUSE VERMONT AVE WILL BE GRADE SEPARATED	LOW RISK	
5	CITY OF ANAHEIM	SEWER	18" VCP SEWER	I VEDMONII AVE	THE EXISTING STORM DRAIN LINE IS IN CONFLICT BECAUSE VERMONT AVE WILL BE GRADE SEPARATED	LOW RISK	



						DESIGNED BY L. HOROWITZ
						DRAWN BY Z. OHN
						CHECKED BY
						M. SATISH IN CHARGE
						D. THOMSON
REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
DRAWING NO. U0656
SCALE
1" = 100'
SHEET NO. 170 OF 245
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No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	CITY OF ANAHEIM	STORM DRAIN	27" RCP		THE EXISTING STORM DRAIN LINE IS CROSSING THE PROPOSED TRACKS THEREFORE WILL NEED TO BE ENCASED	LOW RISK	
2	CITY OF ANAHEIM	STORM DRAIN	45" RCP	BALL ROAD	THE EXISTING STORM DRAIN IS IN CONFLICT BECAUSE BALL ROAD WILL BE GRADE SEPARATED	HIGH COST RELOCATION	
3	THE GAS COMPANY	GAS	12" H GAS	BALL ROAD	THE EXISTING GAS LINE IS IN CONFLICT BECAUSE BALL ROAD WILL BE GRADE SEPARATED	HIGH RISK	
4	CITY OF ANAHEIM	WATER	18" WATER	BALL ROAD	THE EXISTING WATER LINE IS IN CONFLICT BECAUSE BALL ROAD WILL BE GRADE SEPARATED	LOW RISK	
(5)	CITY OF ANAHEIM	STORM DRAIN	45" RCP	BALL ROAD	THE EXISTING STORM DRAIN IS IN CONFLICT BECAUSE BALL ROAD WILL BE GRADE SEPARATED	HIGH COST RELOCATION	
6	CITY OF ANAHEIM	SEWER	15" VCP SEWER	BALL ROAD	THE EXISTING SEWER LINE IS IN CONFLICT BECAUSE BALL ROAD WILL BE GRADE SEPARATED	LOW RISK	



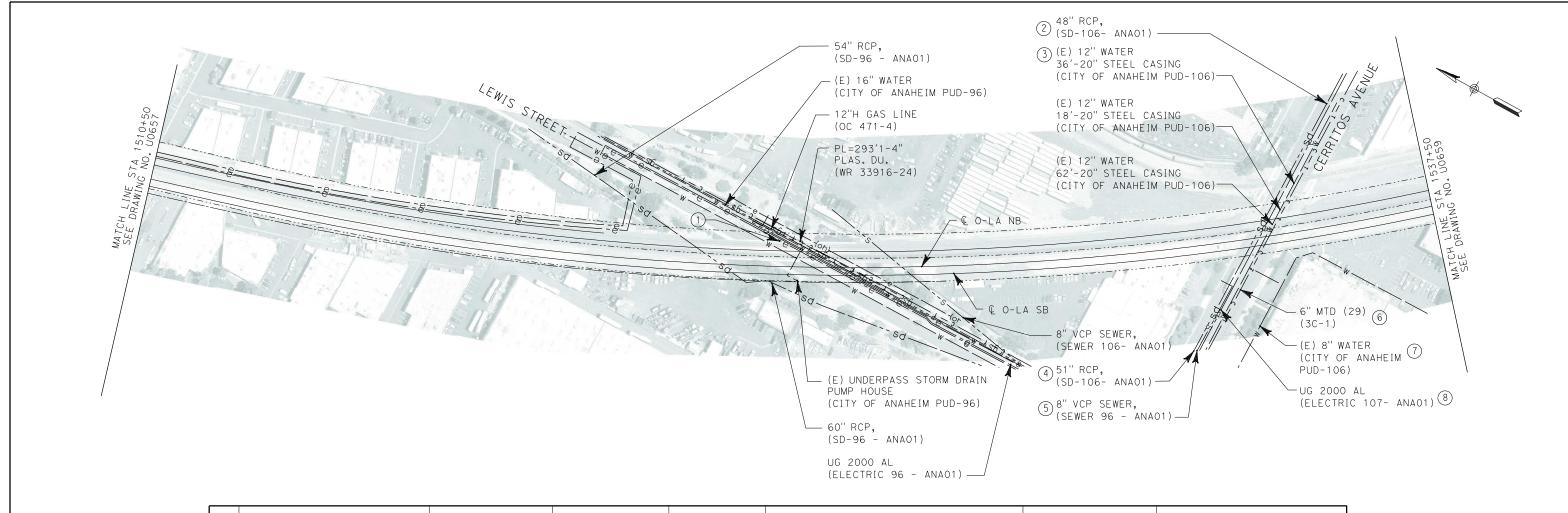
							DESIGNED BY L. HOROWITZ
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							CHECKED BY
							M. SATISH
ZW							IN CHARGE D. THOMSON
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CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

Γ	CONTRACT NO. HSR06-0005
	DRAWING NO. U0657
	1'' = 100'
	SHEET NO. 171 OF 245



No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	SCE	ELECTRICAL	66 kV	LEWIS STREET	THE EXISTING ELECTRICAL LINE IS IN CONFLICT BECAUSE CERRITOS AVE WILL BE GRADE SEPARATED	HIGH COST RELOCATION	
2	CITY OF ANAHEIM	STORM DRAIN	48" RCP	CERRITOS AVE	THE EXISTING STORM DRAIN LINE IS IN CONFLICT BECAUSE CERRITOS AVE WILL BE GRADE SEPARATED	HIGH COST RELOCATION	
3	CITY OF ANAHEIM	WATER	12" WATER	CERRITOS AVE	THE EXISTING WATER LINE IS IN CONFLICT BECAUSE CERRITOS AVE WILL BE GRADE SEPARATED	LOW RISK	
4	CITY OF ANAHEIM	STORM DRAIN	51" RCP	CERRITOS AVE	THE EXISTING STORM DRAIN LINE IS IN CONFLICT BECAUSE CERRITOS AVE WILL BE GRADE SEPARATED	HIGH COST RELOCATION	
(5)	CITY OF ANAHEIM	SEWER	8" VCP	CERRITOS AVE	THE EXISTING SEWER LINE IS IN CONFLICT BECAUSE CERRITOS AVE WILL BE GRADE SEPARATED	LOW RISK	
6	CONDUIT - OC	COMMUNICATION	6" MTD	CERRITOS AVE	THE EXISTING COMMUNICATION LINE IS IN CONFLICT BECAUSE CERRITOS AVE WILL BE GRADE SEPARATED	LOW RISK	
7	CITY OF ANAHEIM	WATER	8" WATER	CERRITOS AVE	THE EXISTING WATER LINE IS IN CONFLICT BECAUSE CERRITO AVE WILL BE GRADE SEPARATED	LOW RISK	
8	CITY OF ANAHEIM	ELECTRICAL	UG 2000 AL	CERRITOS AVE	THE EXISTING ELECTRICAL LINE IS IN CONFLICT BECAUSE CERRITO AVE WILL BE GRADE SEPARATED	HIGH COST RELOCATION	



							L. HOROWITZ
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							CHECKED BY
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CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

EXISTING COMPOSITE UTILITIES
PLAN

CONTRACT NO. HSR06-0005
HSRU6-0005
DRAWING NO.
U0658
1" = 100'
SHEET NO. 172 OF 245

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No.	COMPANY	TYPE OF UTILITY	DESCRIPTION	LOCATION	CONFLICT	TYPE OF CONFLICT	DISPOSITION
1	ORANGE COUNTY SANTITATION DISTRICT	SEWER	15" VCP	STATE COLLEGE BLVD	THE EXISTING SEWER LINE IS IN CONFLICT BECAUSE STATE COLLEGE BLVD WILL BE GRADE SEPARATED	LOW RISK	
2	ORANGE COUNTY SANTITATION DISTRICT	SEWER	39" RCP	STATE COLLEGE BLVD	THE EXISTING SEWER LINE IS IN CONFLICT BECAUSE STATE COLLEGE BLVD WILL BE GRADE SEPARATED	LOW RISK	
3	CITY OF ANAHEIM	WATER	18" WATER	STATE COLLEGE BLVD	THE EXISTING WATER LINE IS IN CONFLICT BECAUSE STATE COLLEGE BLVD WILL BE GRADE SEPARATED	LOW RISK	
4	THE GAS COMPANY	GAS	6" GAS	STATE COLLEGE BLVD	THE EXISTING GAS LINE IS IN CONFLICT BECAUSE STATE COLLEGE BLVD WILL BE GRADE SEPARATED	HIGH RISK	
(5)	CITY OF ANAHEIM	WATER	18" WATER	STATE COLLEGE BLVD	THE EXISTING WATER LINE IS IN CONFLICT BECAUSE STATE COLLEGE BLVD WILL BE GRADE SEPARATED	LOW RISK	
6	CITY OF ANAHEIM	ELECTRICAL	UG 12 kV 1000 AL	STATE COLLEGE BLVD	THE EXISTING ELECTRICAL LINE IS IN CONFLICT BECAUSE STATE COLLEGE BLVD WILL BE GRADE SEPARATED	HIGH COST RELOCATION	

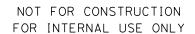






CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005
DRAWING NO.
U0659
1" = 100'
SHEET NO. 173 OF 245



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						Z. OHN
						CHECKED BY
						M. SATISH
						IN CHARGE
						D. THOMSON
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REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

CONTRACT NO. HSR06-0005					
DRAWING NO. U0660					
SCALE					
1" = 100'					
SHEET NO.					
174 OF 245					



							DESIGNED BY L. HOROWITZ
							DRAWN BY Z. OHN
							CHECKED BY
							M. SATISH IN CHARGE
Zm							D. THOMSON
	REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09



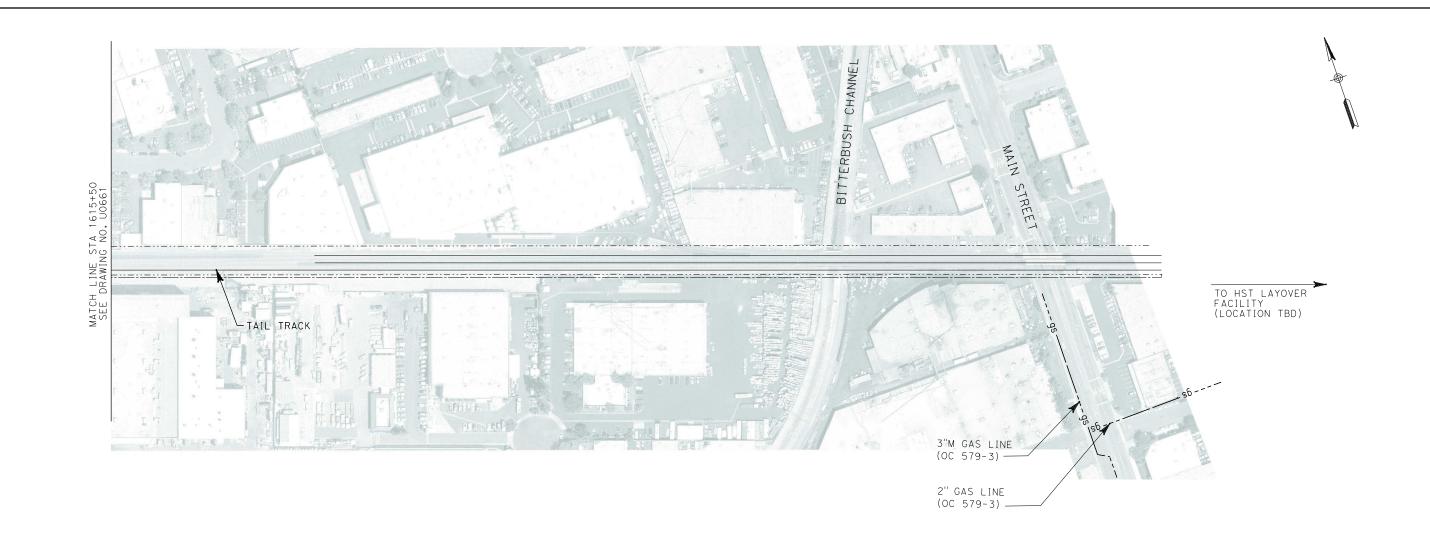


CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

EXISTING COMPOSITE UTILITIES PLAN

CONTRACT NO. HSR06-0005
DRAWING NO. U0661
1'' = 100'
SHEET NO. 175 OF 245

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DESIGNED BY
L. HOROWITZ
DRAWN BY
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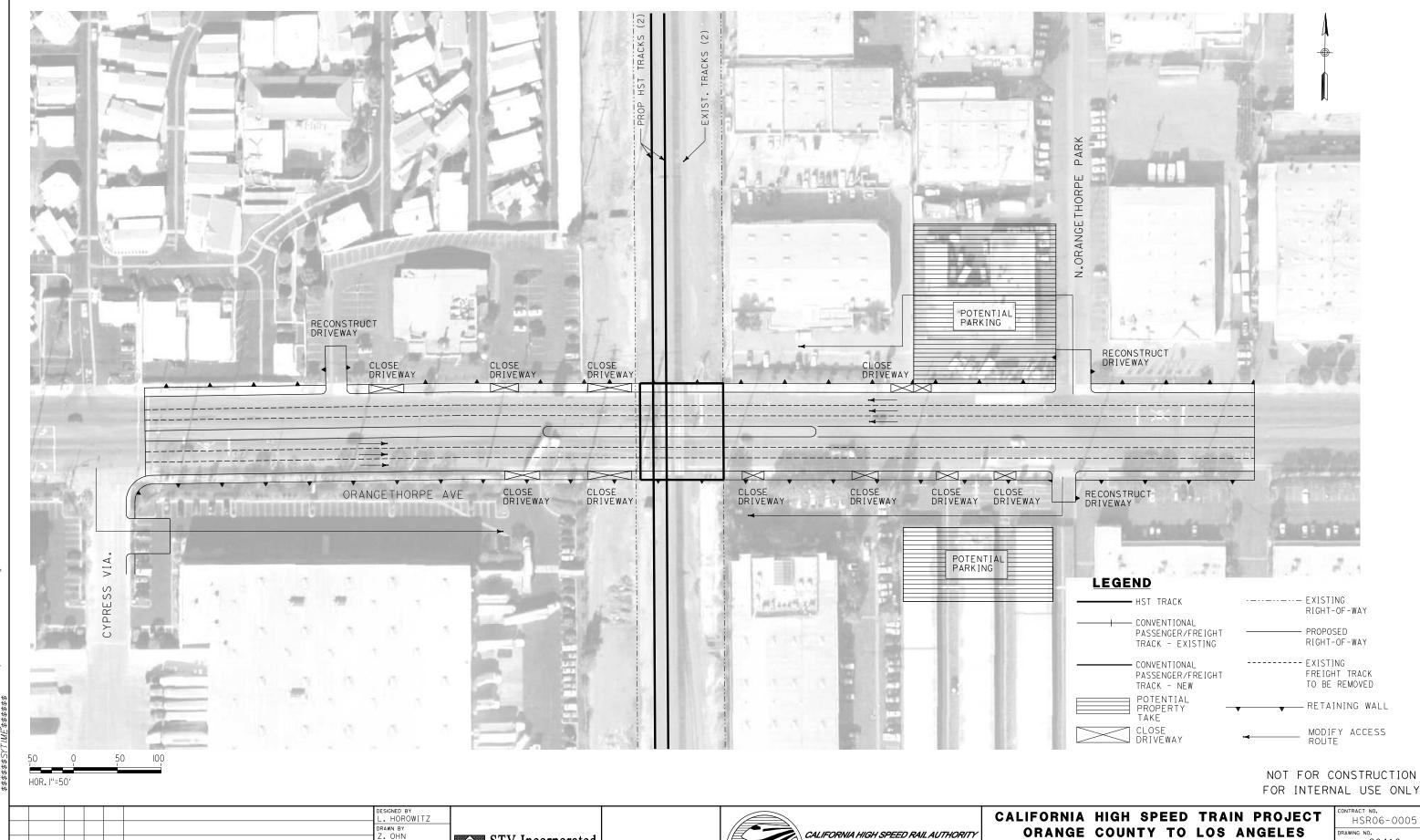
CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

EXISTING COMPOSITE UTILITIES PLAN

Γ	CONTRACT NO. HSR06-0005
	DRAWING NO.
	U0662
	SCALE
	1" = 100'
	SHEET NO.

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176 OF 245



STV Incorporated
INCORPS/MOHERS/PA. INCORPS/MOHERS/PA. INCORPS/MOHERS/PA. INCORPORATION MANAGERS
1055 WEST SEVENTH STORET, SUITE 3150
LOS ANGELES, CA 90017-2556

CHECKED BY A. SATISH

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CHARGE . THOMSON

02-13-09

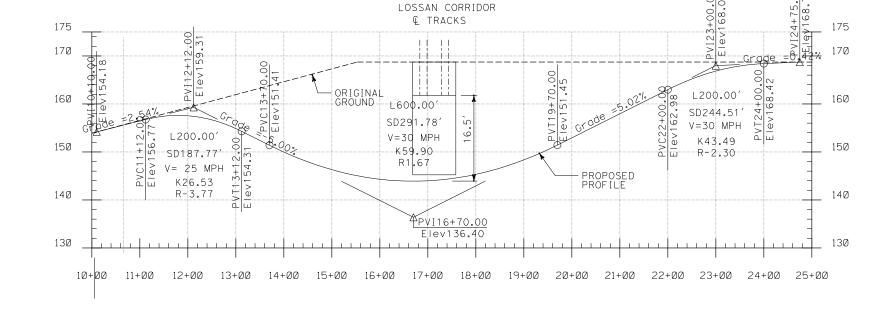
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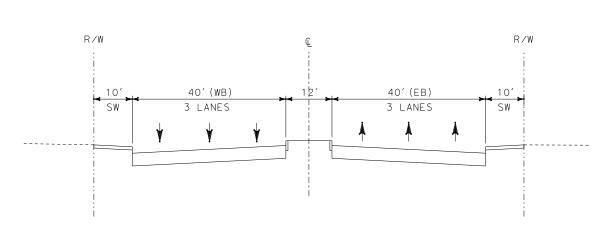
FLYCALIFORNIA

REV DATE BY SUB APP

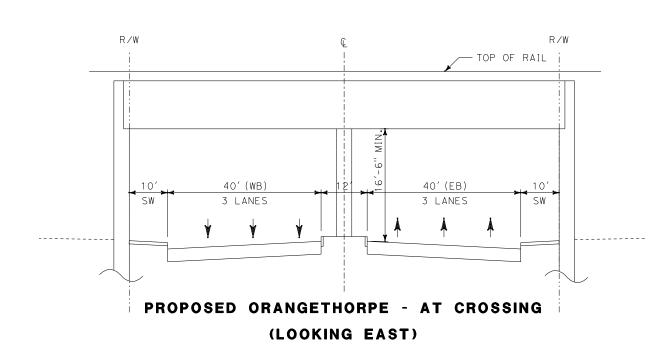
ORANGETHORPE AVE. GRADE SEPARATION PLAN

ORANGE COUNTY TO LOS ANGELES CO410 AS SHOWN SHEET NO. 177 OF 245 DEDICATED HST (4+2) MIXED-GRADE ALTERNATIVE





EXISTING ORANGETHORPE - EAST AND WEST OF CROSSING (LOOKING EAST)



NOT FOR CONSTRUCTION FOR INTERNAL USE ONLY





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

ORANGETHORPE AVE. GRADE SEPARATION PROFILE AND SECTIONS

CONTRACT NO. HSR06-0005							
DRAWING NO.							
SCALE AS SHOWN							
SHEET NO. 178 OF 245							

REV DATE BY SUB APP

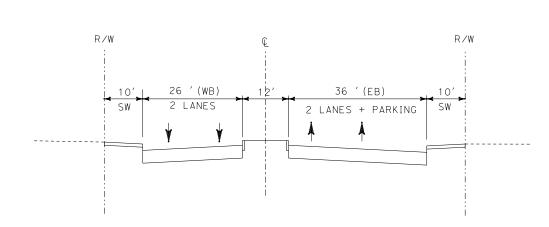
DESCRIPTION

02-13-09

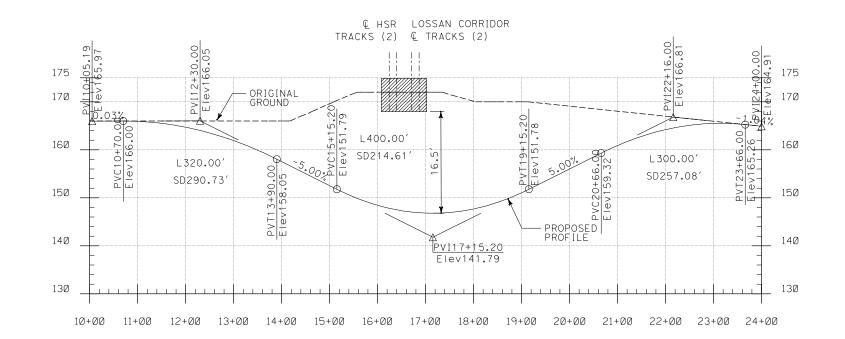
PLAN

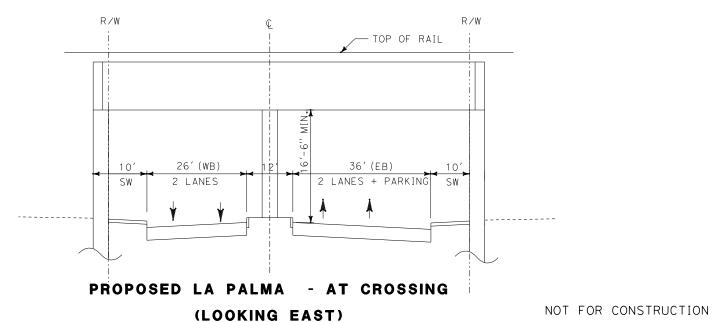
SHEET NO. 179 OF 245





EXISTING LA PALMA - EAST AND WEST OF CROSSING (LOOKING EAST)





FOR INTERNAL USE ONLY

DESIGNED BY L. HOROWITZ DRAWN BY Z. OHN CHECKED BY M. SATISH CHARGE . THOMSON REV DATE BY SUB APP DESCRIPTION 02-13-09

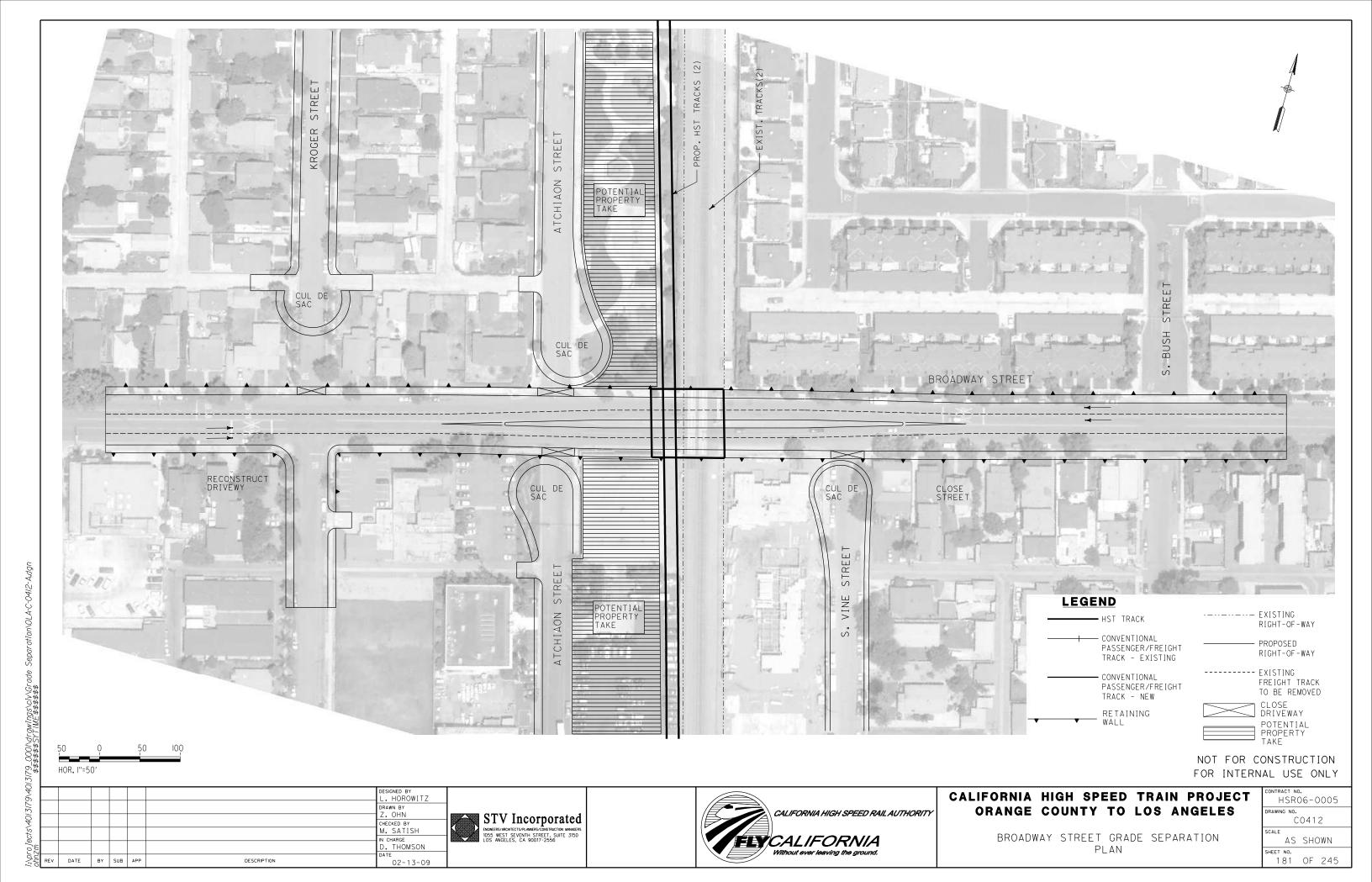




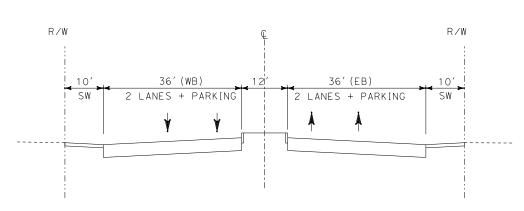
CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

LA PALMA AVE. GRADE SEPARATION PROFILE AND SECTIONS

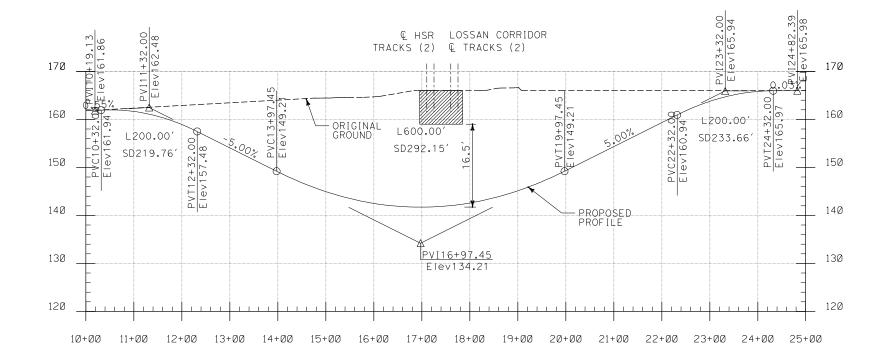
CONTRACT NO.
HSR06-0005
DRAWING NO.
C0301
SCALE
AS SHOWN
SHEET NO.
180 OF 245

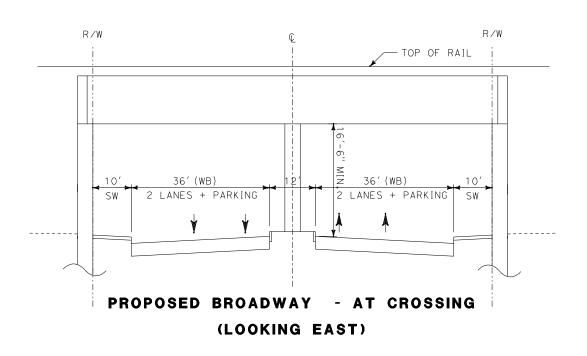


DEDICATED HST (4+2) MIXED-GRADE ALTERNATIVE



EXISTING BROADWAY - EAST AND WEST OF CROSSING (LOOKING EAST)





NOT FOR CONSTRUCTION FOR INTERNAL USE ONLY





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

BROADWAY STREET GRADE SEPARATION PROFILE AND SECTIONS

CONTR	ACT NO	
F	1SR(06-0005
DRAWIN	G NO.	
	С	0302
SCALE		
	AS	SHOWN
SHEET	NO.	

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REV DATE BY SUB APP

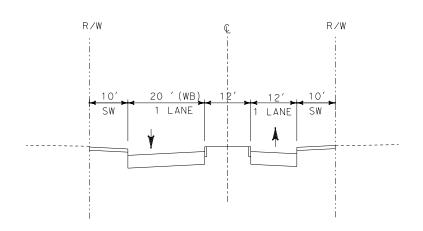
DESCRIPTION

02-13-09

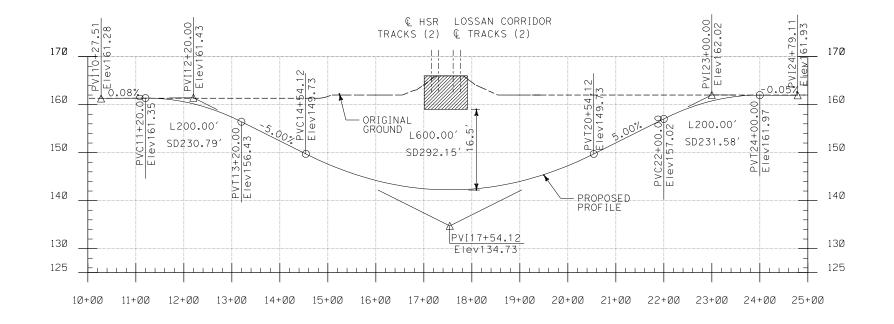
PLAN

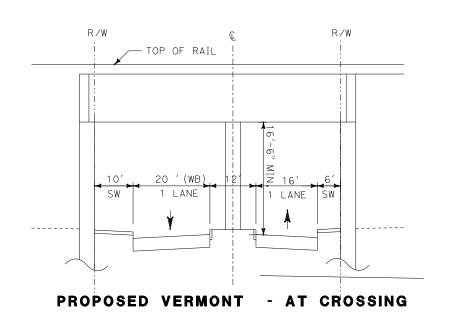
SHEET NO. 183 OF 245

DEDICATED HST (4+2) MIXED-GRADE ALTERNATIVE



EXISTING VERMONT - EAST AND WEST OF CROSSING (LOOKING EAST)





(LOOKING EAST)

NOT FOR CONSTRUCTION FOR INTERNAL USE ONLY

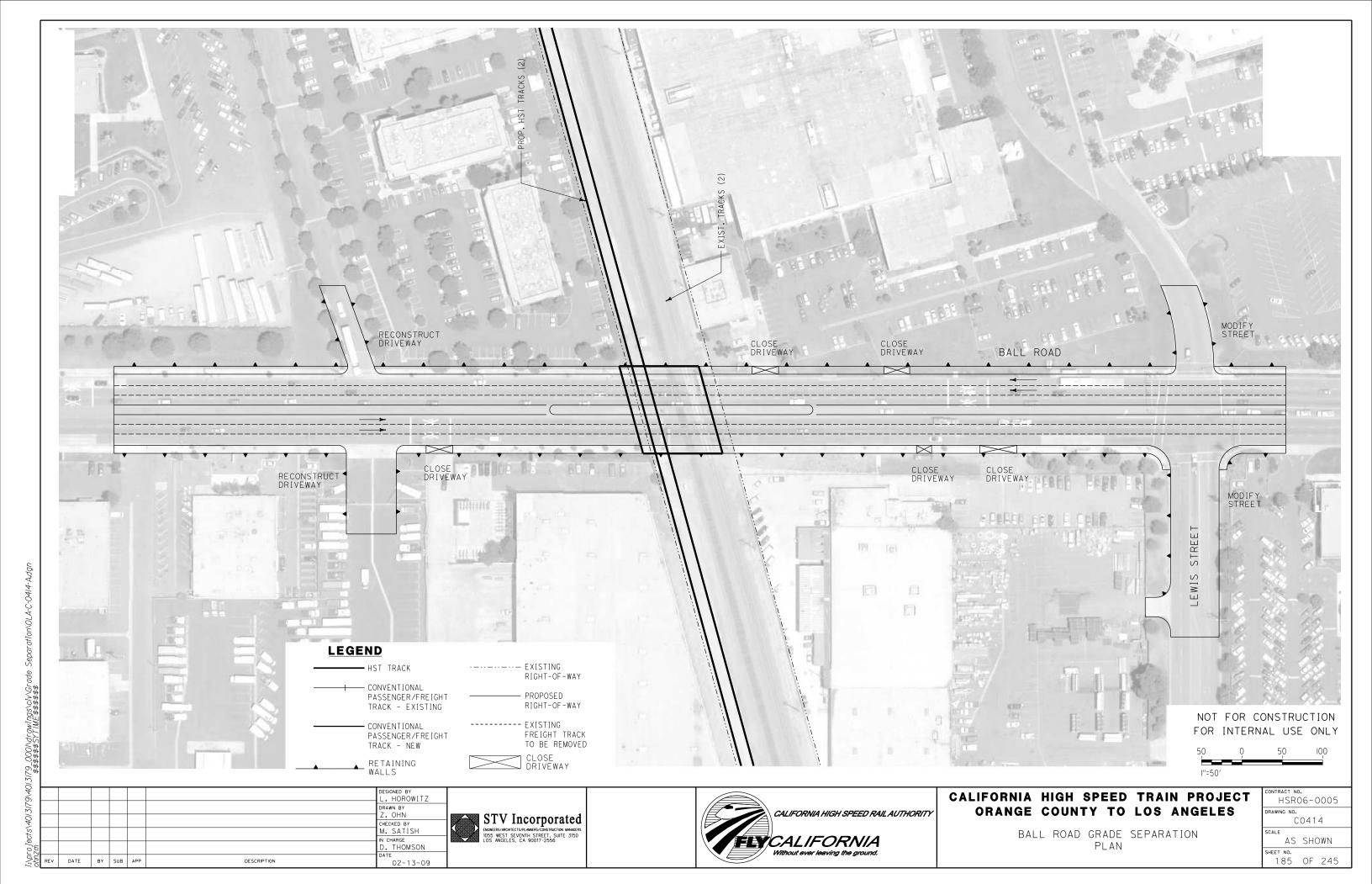




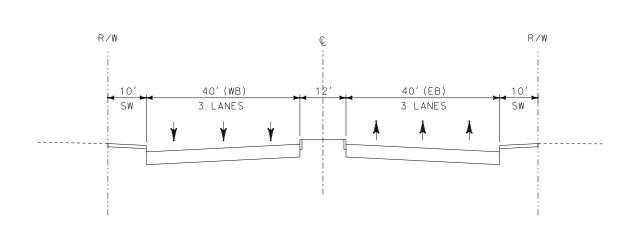
CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

VERMONT AVE. GRADE SEPARATION PROFILE AND SECTIONS

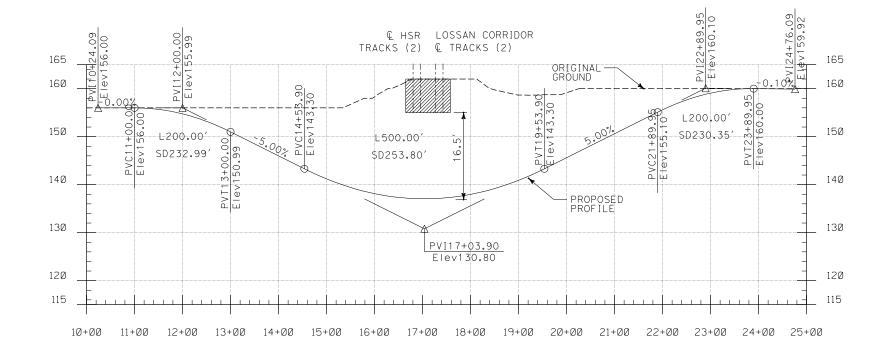
CONTRACT NO.
HSR06-0005
DRAWING NO.
C0303
SCALE
AS SHOWN
SHEET NO.
184 OF 245

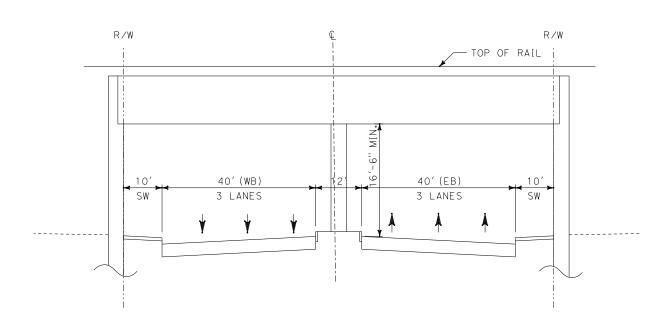


DEDICATED HST (4+2) MIXED-GRADE ALTERNATIVE



EXISTING BALL - EAST AND WEST OF CROSSING (LOOKING EAST)





PROPOSED BALL - AT CROSSING (LOOKING EAST)

NOT FOR CONSTRUCTION FOR INTERNAL USE ONLY



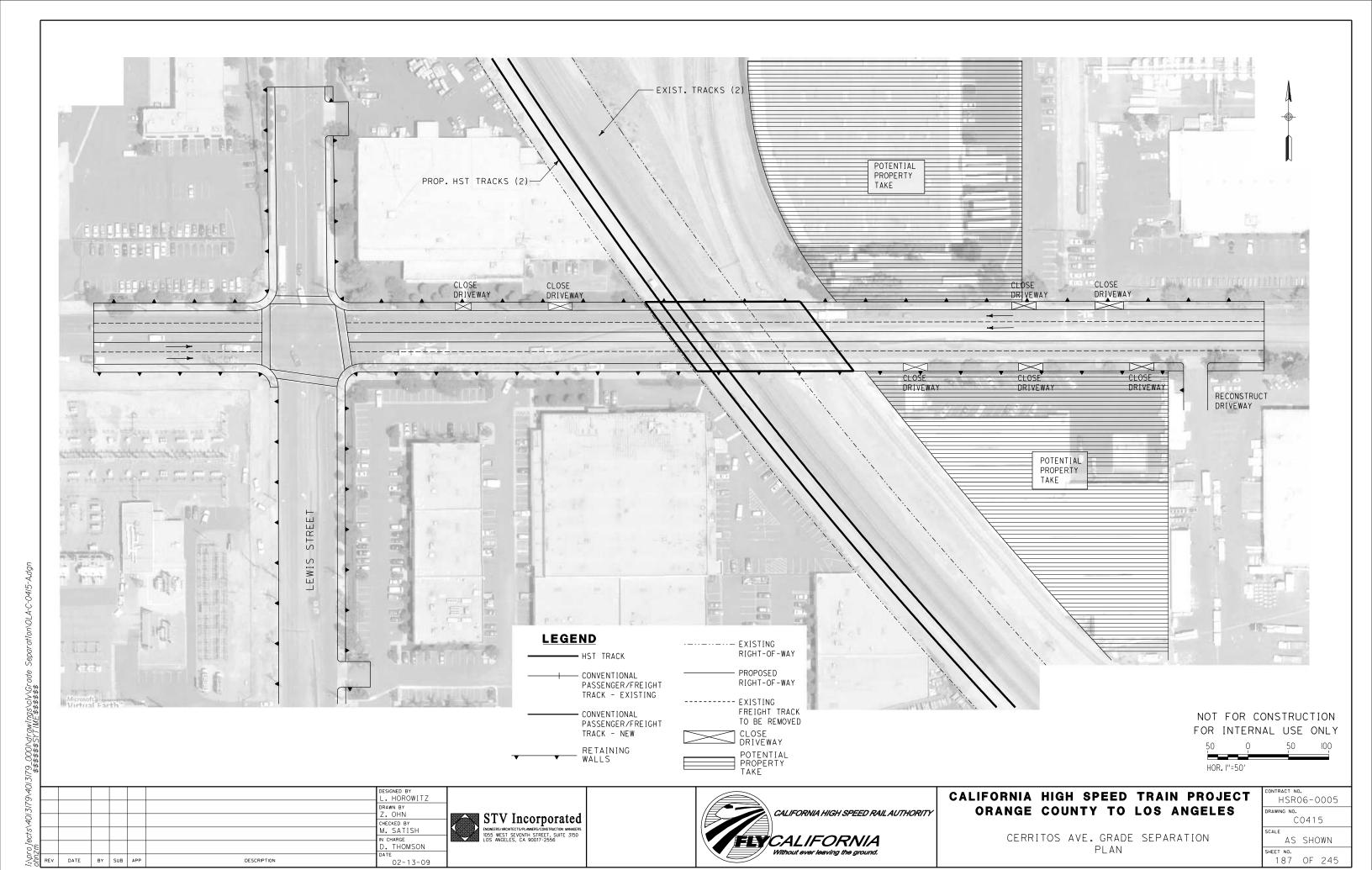


CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

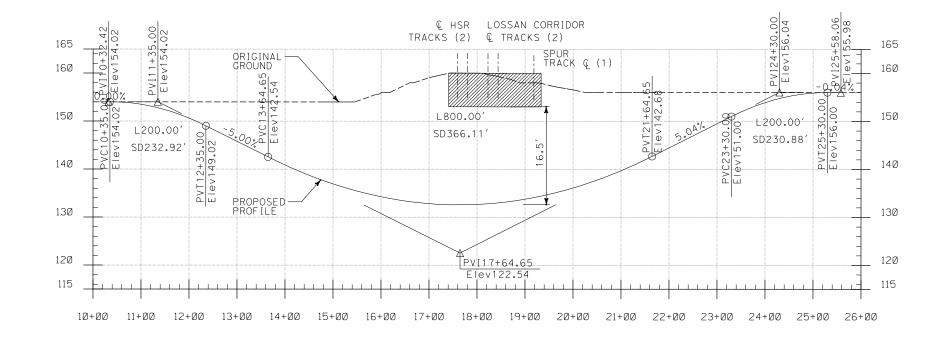
BALL ROAD GRADE SEPARATION PROILE AND SECTIONS

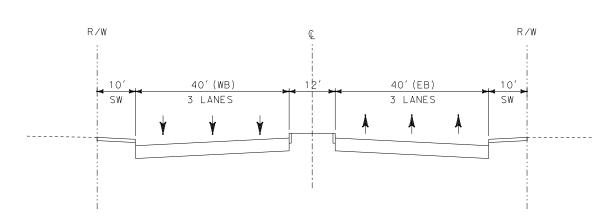
CONTR	ACT NO).
F	1SR	06-0005
DRAWIN	IG NO.	
	С	0304
SCALE		
	ΑS	SHOWN

SHEET NO. 186 OF 245

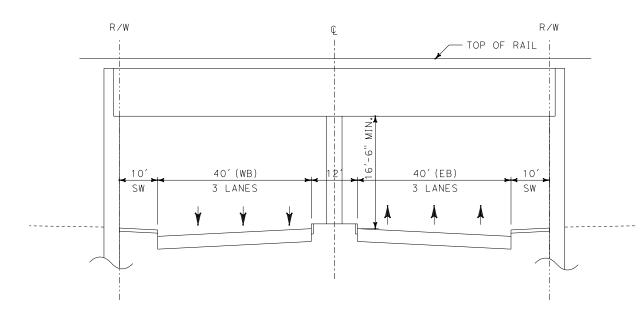








EXISTING BALL - EAST AND WEST OF CROSSING (LOOKING EAST)



PROPOSED BALL - AT CROSSING (LOOKING EAST)

NOT FOR CONSTRUCTION FOR INTERNAL USE ONLY

ohnzm	REV	DATE	BY	SUB	APP	DESCRIPTION	DATE 02-13-09
a) ac							IN CHARGE D. THOMSON
Λ.							CHECKED BY M. SATISH
1401011							DRAWN BY Z. OHN
7,4							DESIGNED BY L. HOROWITZ

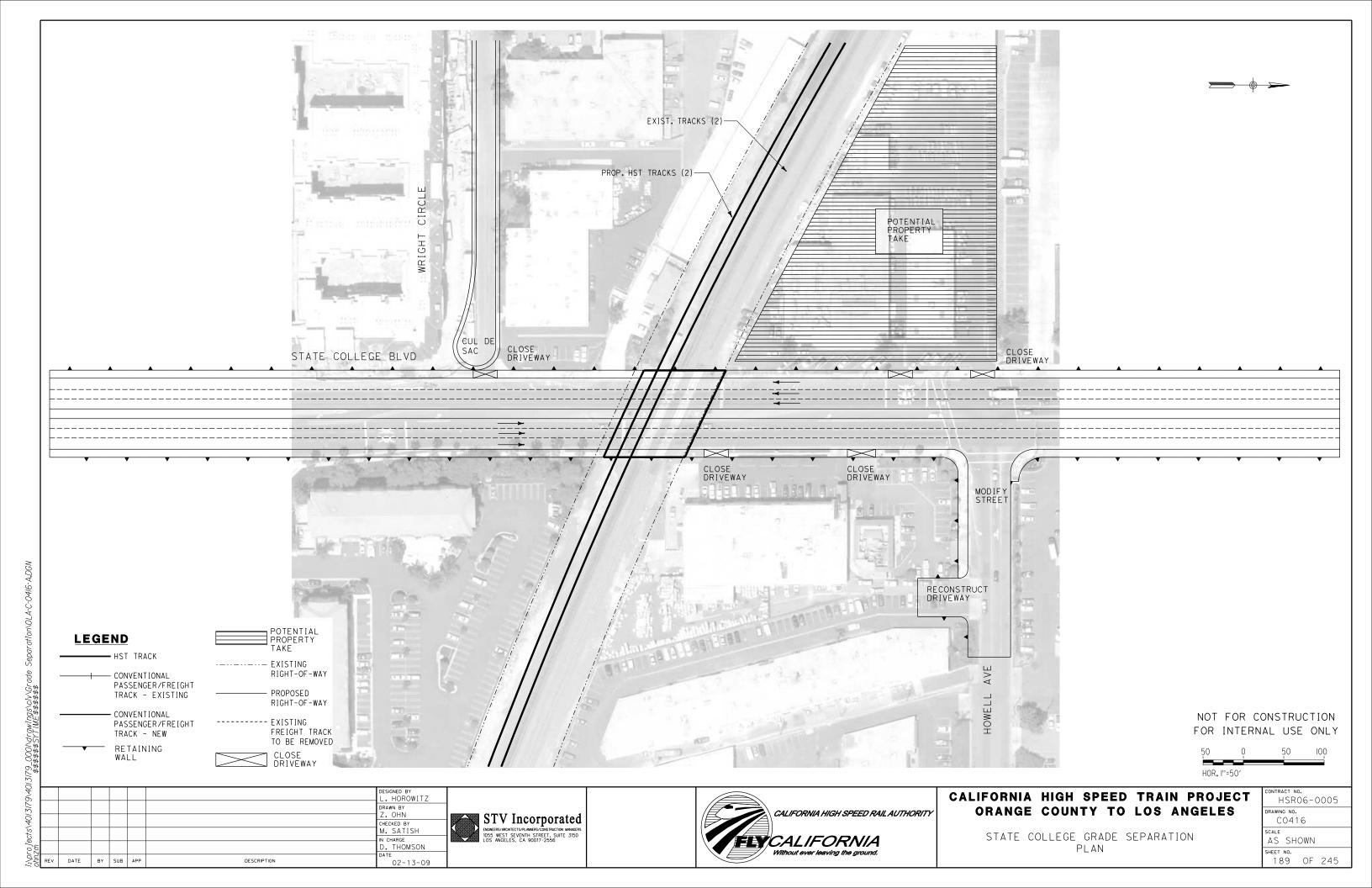




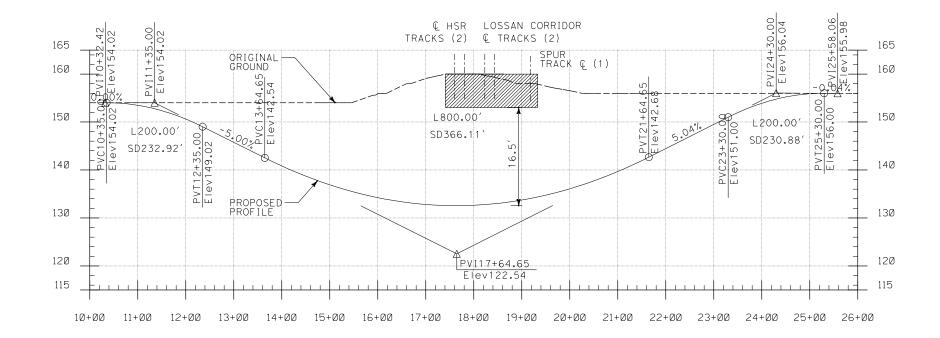
CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

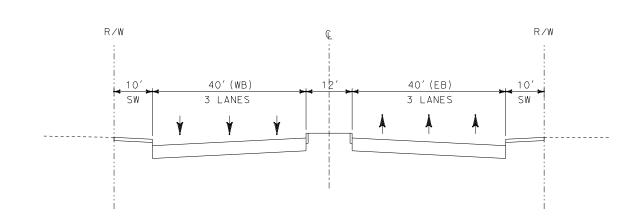
CERRITOS AVE. GRADE SEPARATION PROFILE AND SECTIONS

CONTRACT NO.
HSR06-0005
DRAWING NO.
C0305
SCALE
AS SHOWN
SHEET NO.
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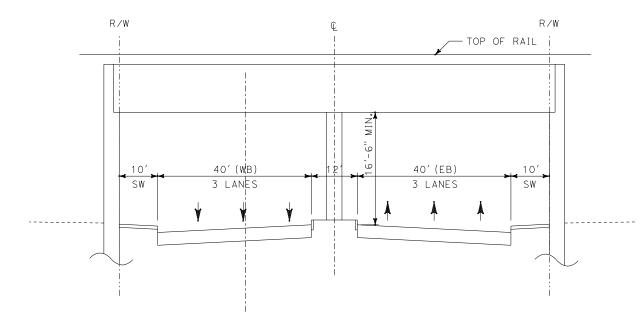


DEDICATED HST (4+2) MIXED-GRADE ALTERNATIVE





EXISTING STATE COLLEGE - EAST AND WEST OF CROSSING (LOOKING EAST)



PROPOSED STATE COLLEGE - AT CROSSING (LOOKING EAST)

NOT FOR CONSTRUCTION FOR INTERNAL USE ONLY

							L. HOROWITZ
							DRAWN BY Z. OHN
!							CHECKED BY
							M. SATISH IN CHARGE
Zm							D. THOMSON
ohnz	REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

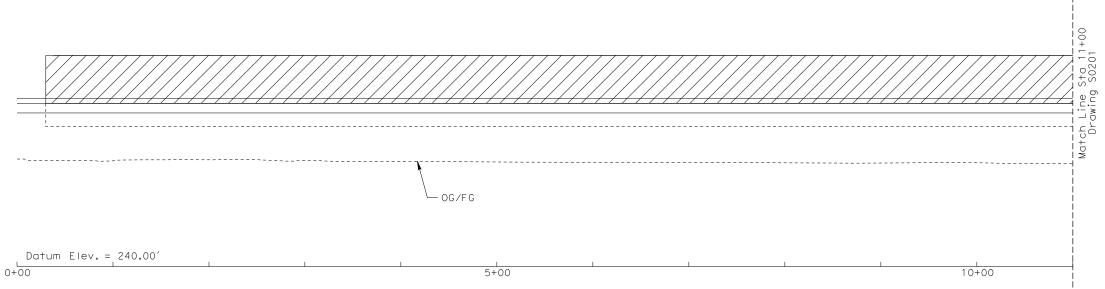
ALIGNMENT / OPTION

STATE COLLEGE GRADE SEPARATION PROFILE AND SECTIONS

CONTRACT NO.
HSR06-0005
DRAWING NO.
C0306
SCALE
AS SHOWN
SHEET NO.
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PROFILE GRADE

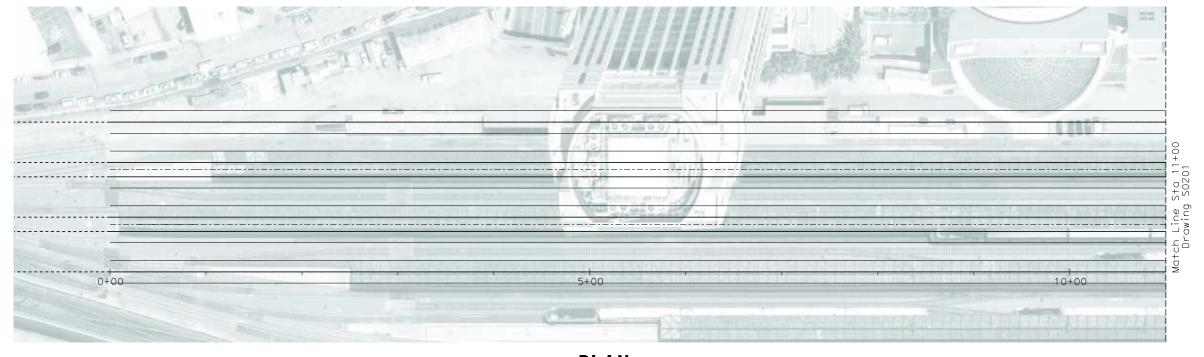
No Scale



ELEVATION

Vert: 1":25" Horz: 1":50'





To Anaheim

NOT FOR CONSTRUCTION FOR INTERNAL USE ONLY



PLAN 1":50'

						DESIGNED BY B. QUERY
						DRAWN BY L. HUFF.
						CHECKED BY
						A. LIU
						IN CHARGE D. THOMSON
REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09





CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

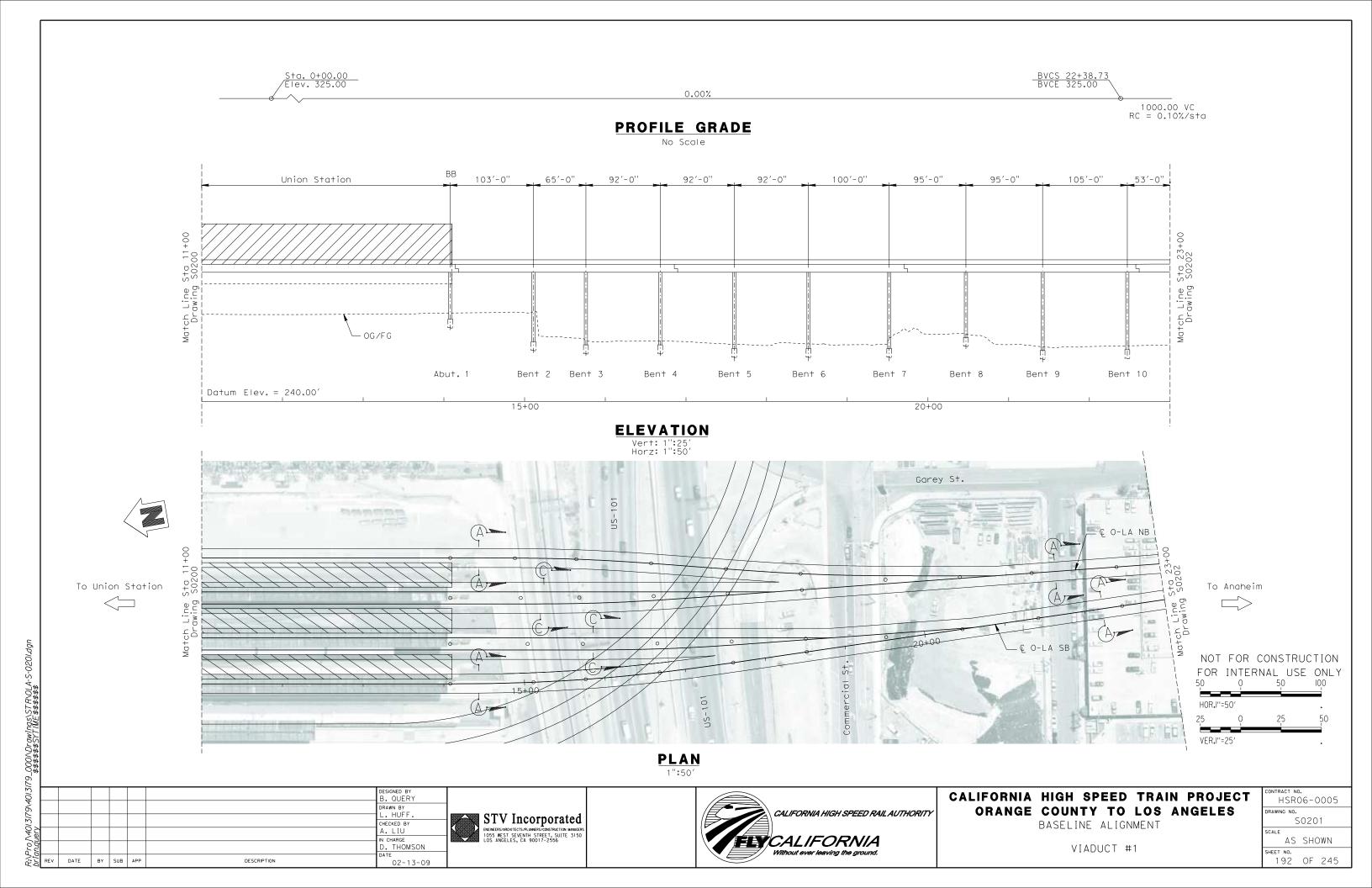
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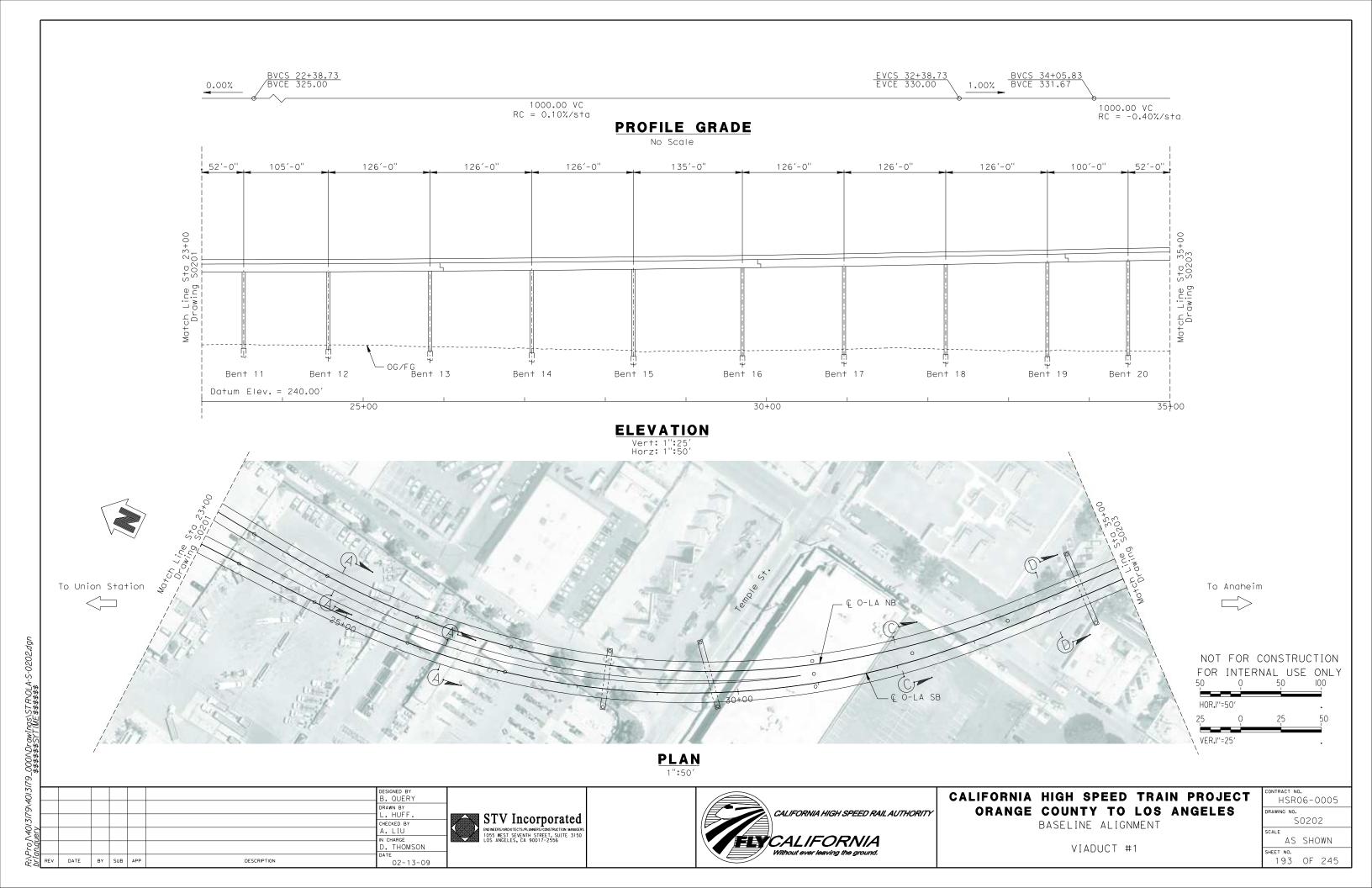
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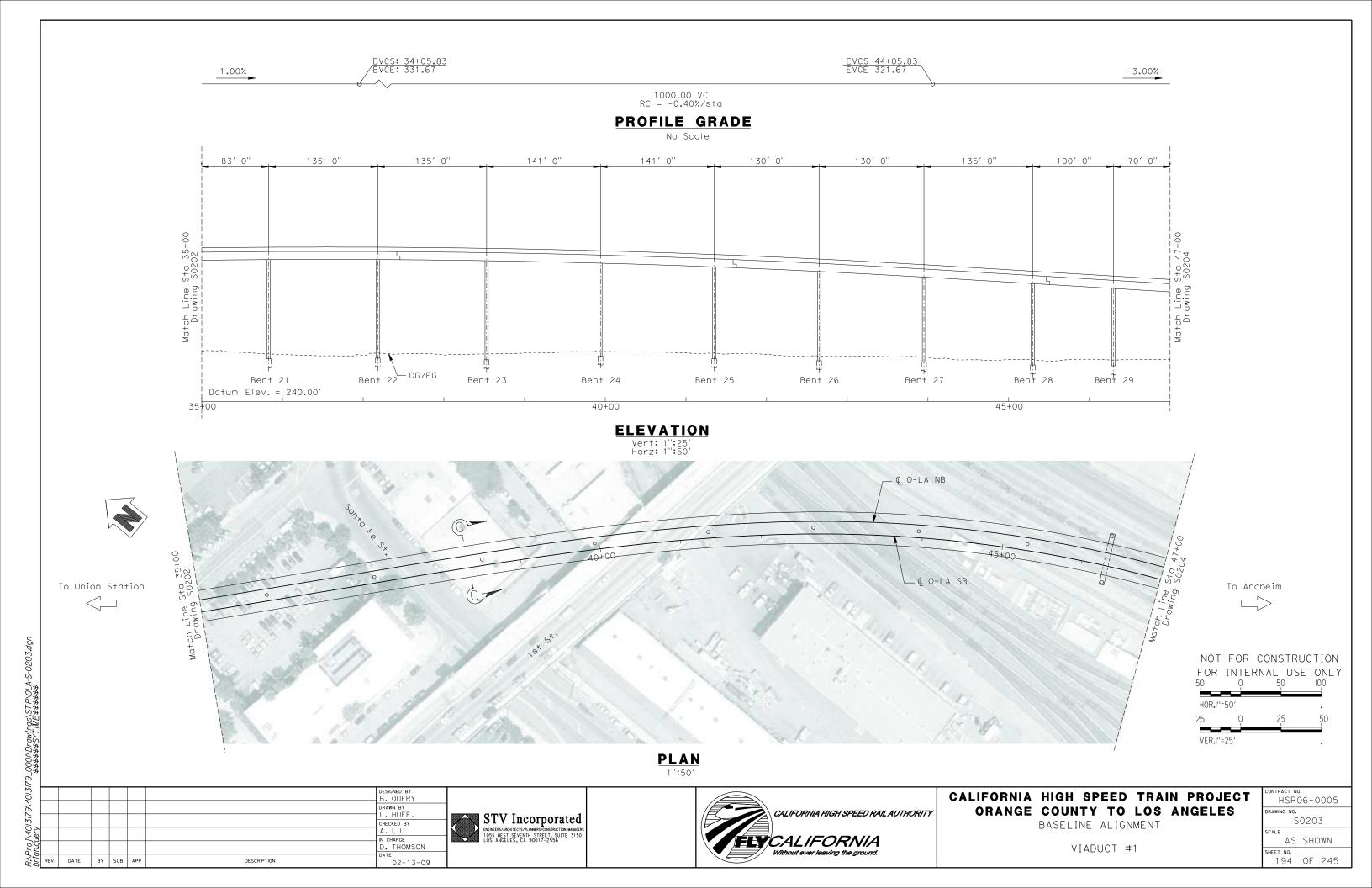
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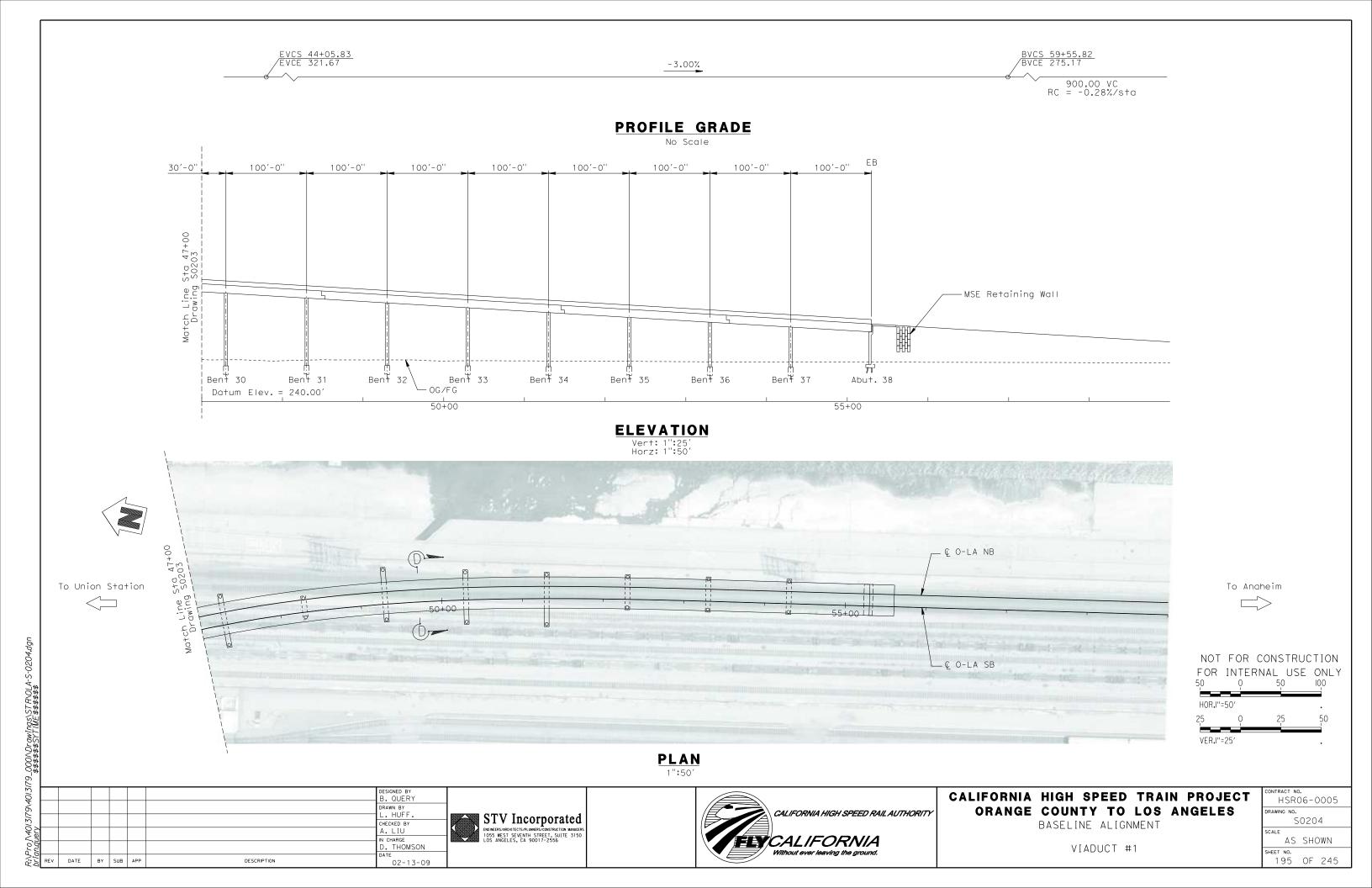
T
CONTRACT NO.
HSR06-0005
DRAWING NO.
S0200
SCALE
AS SHOWN
SHEET NO.
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1

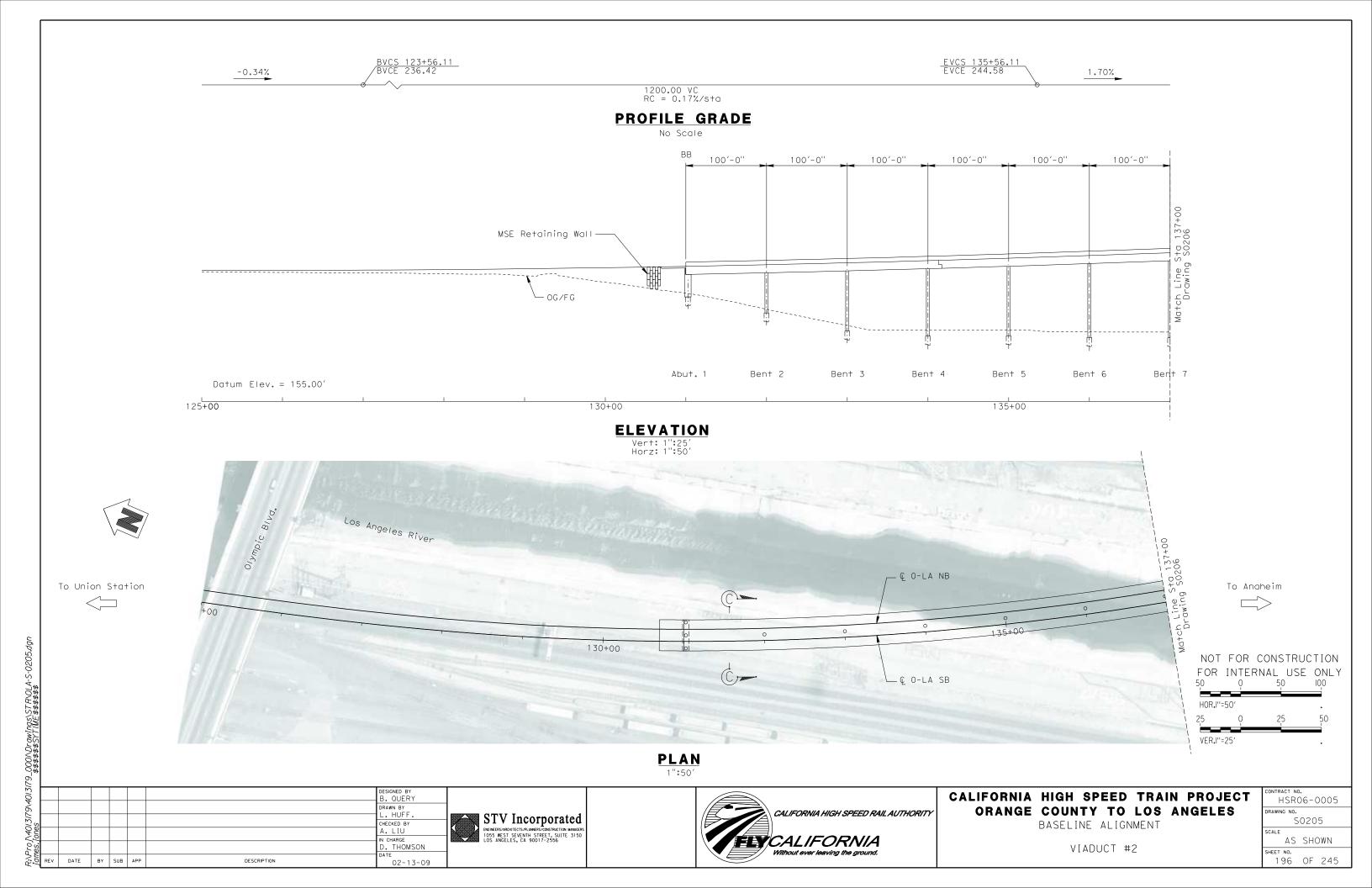
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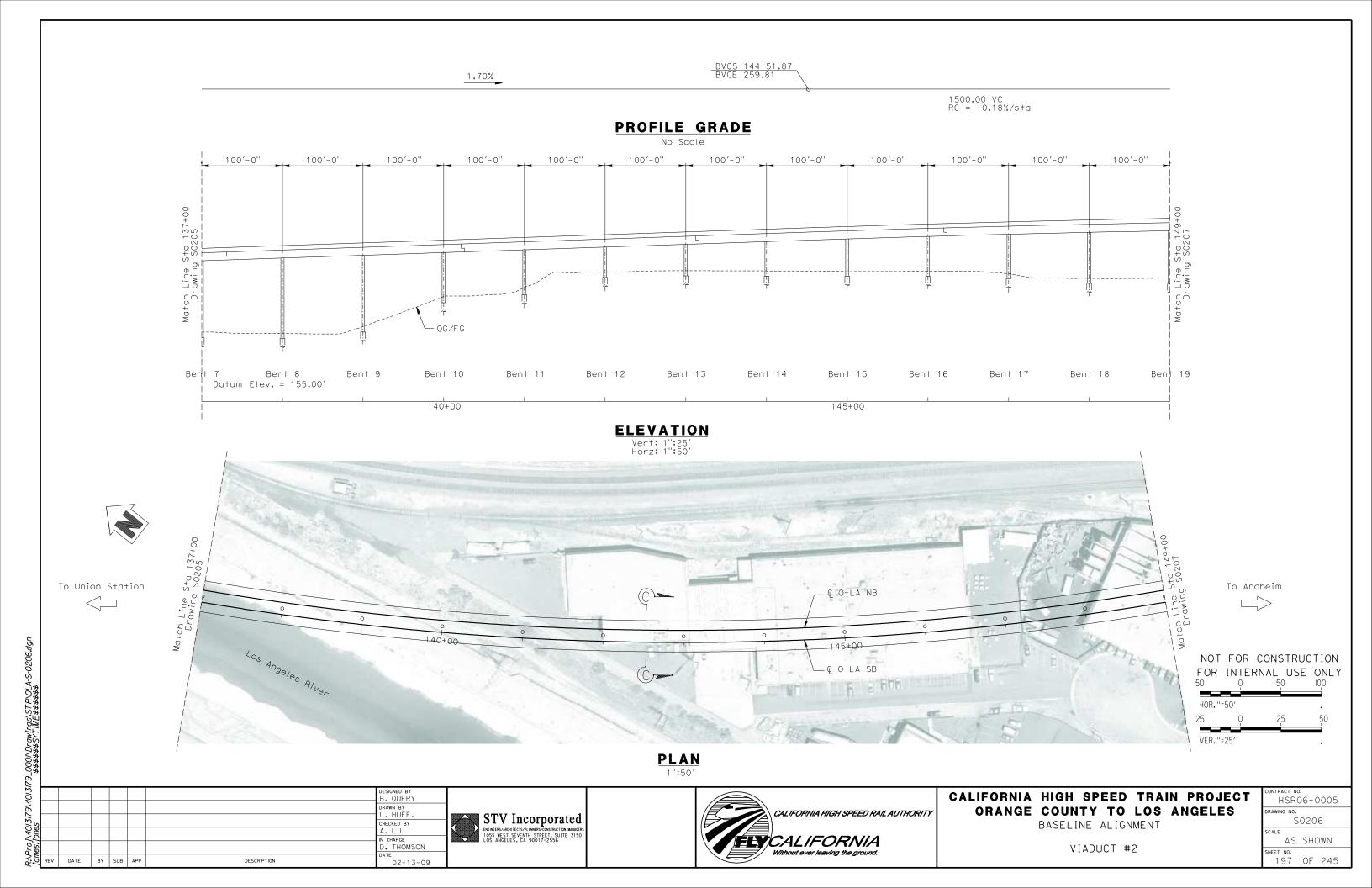


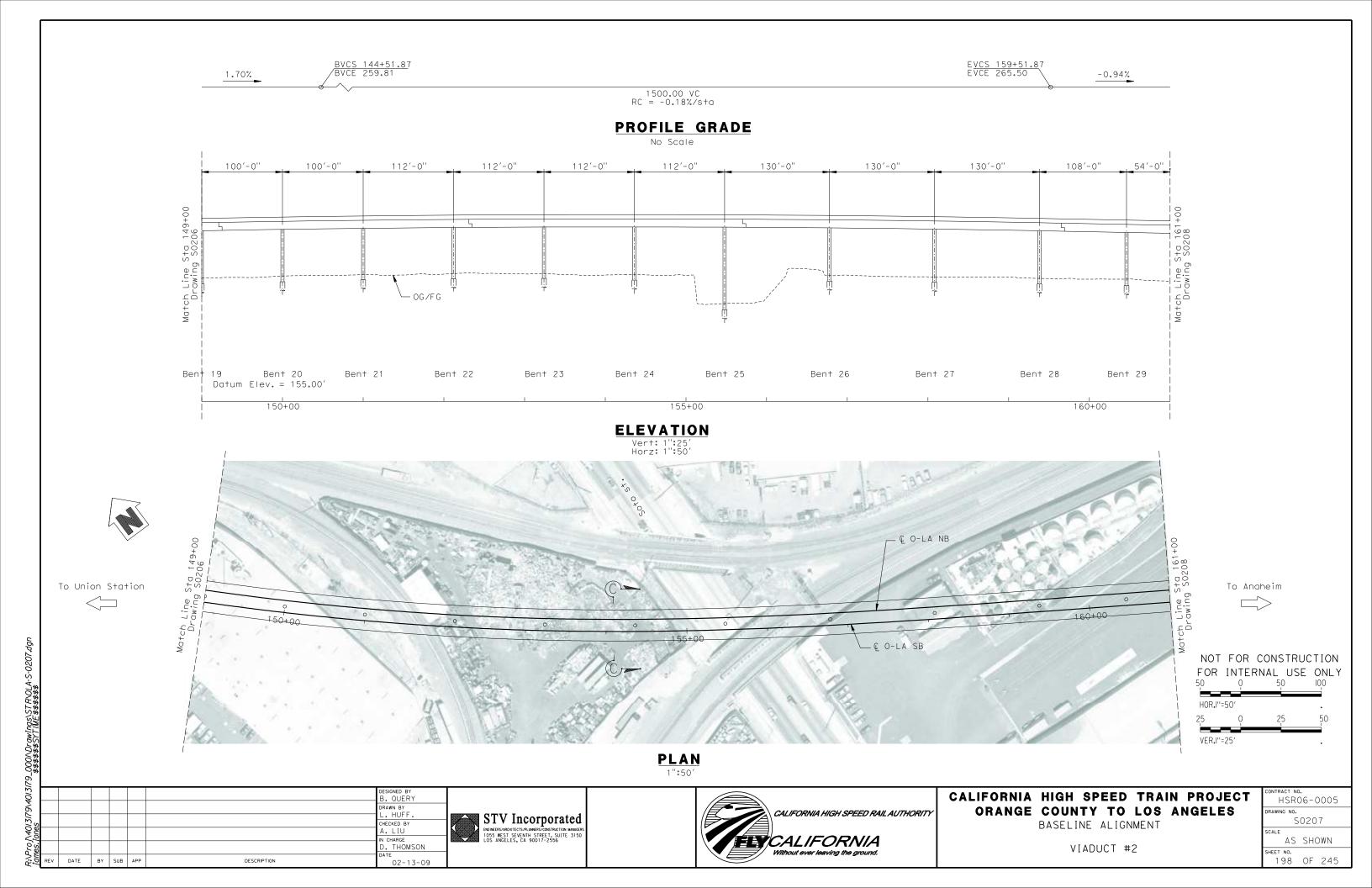


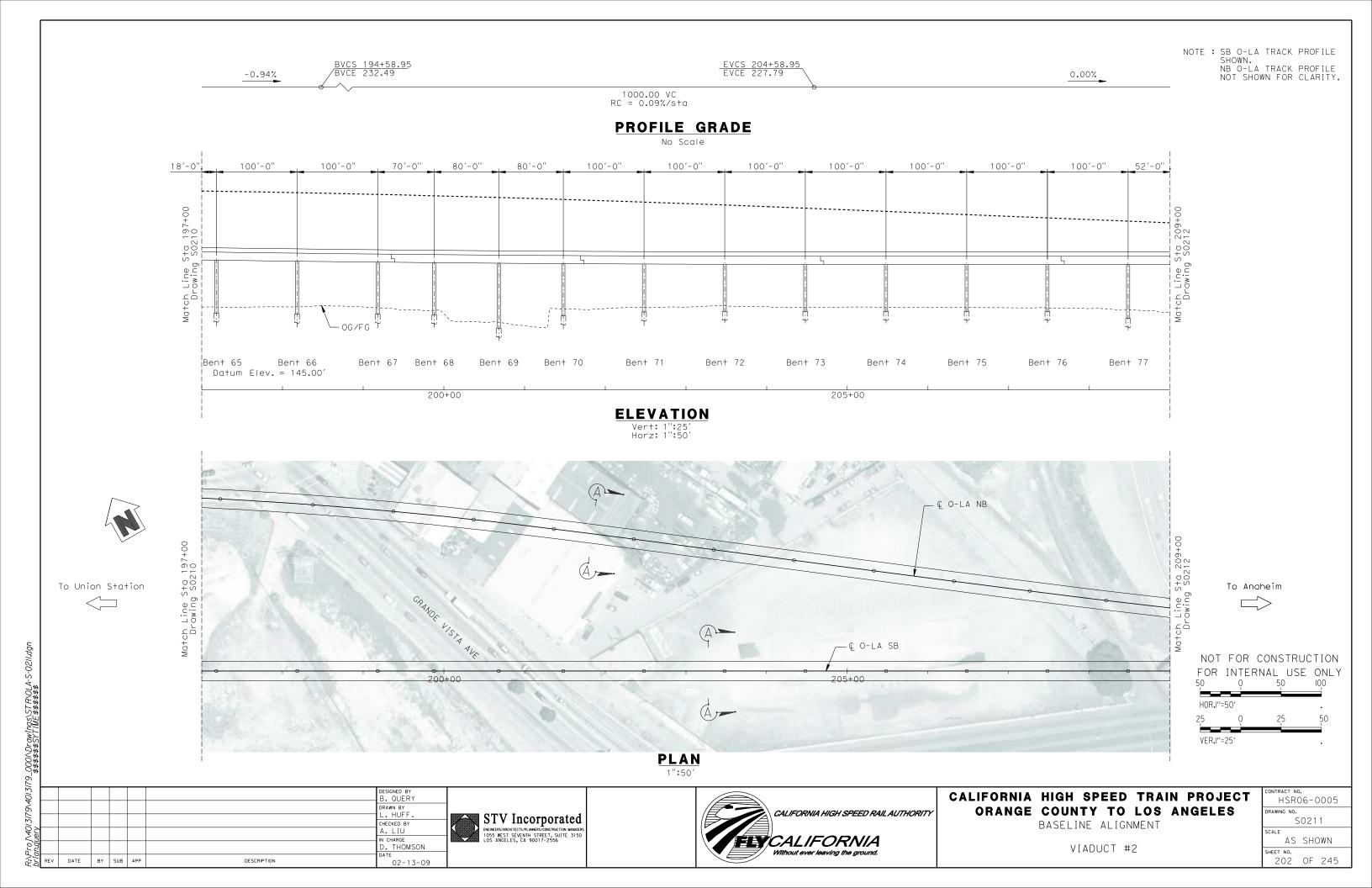








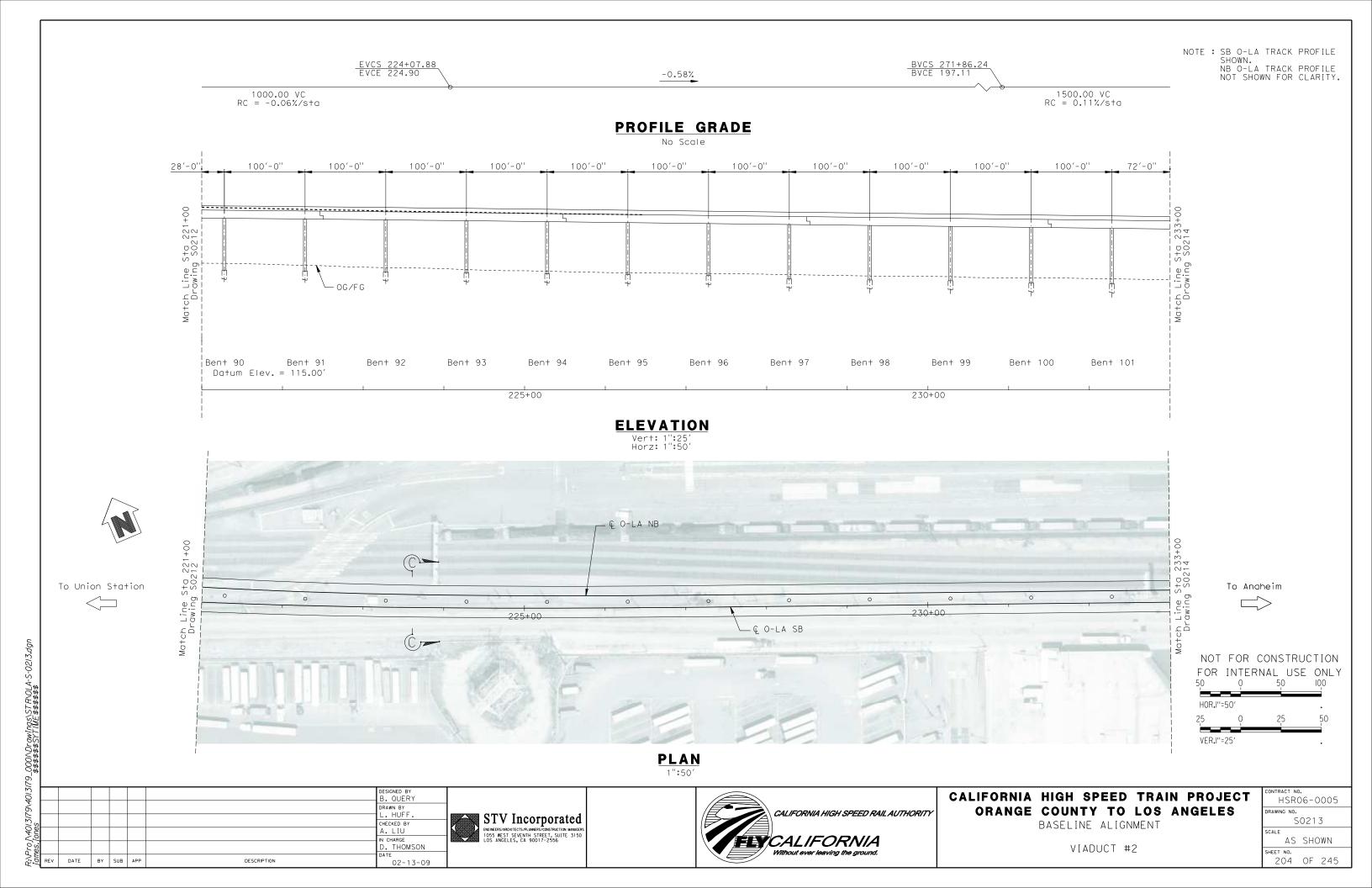


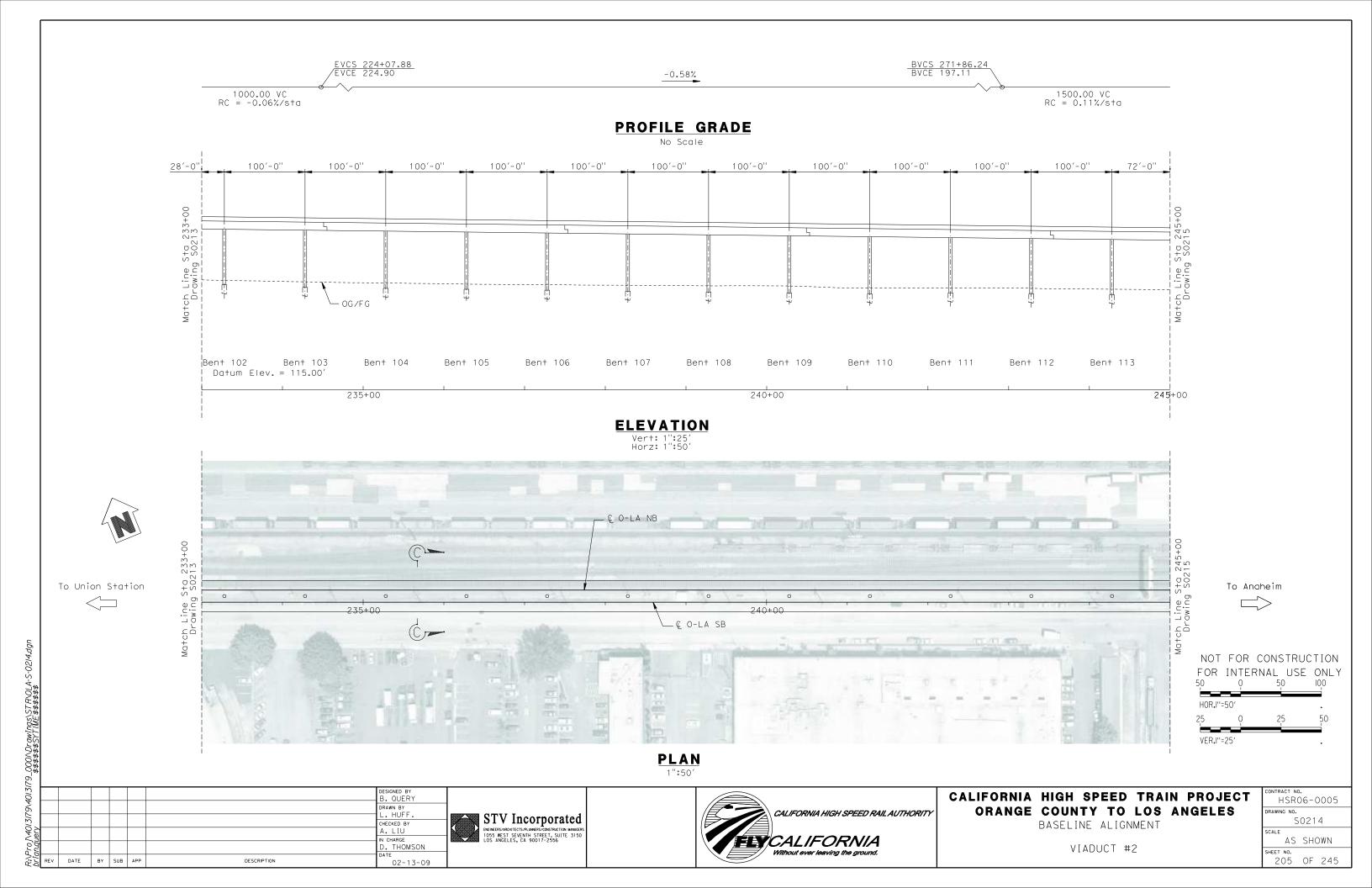


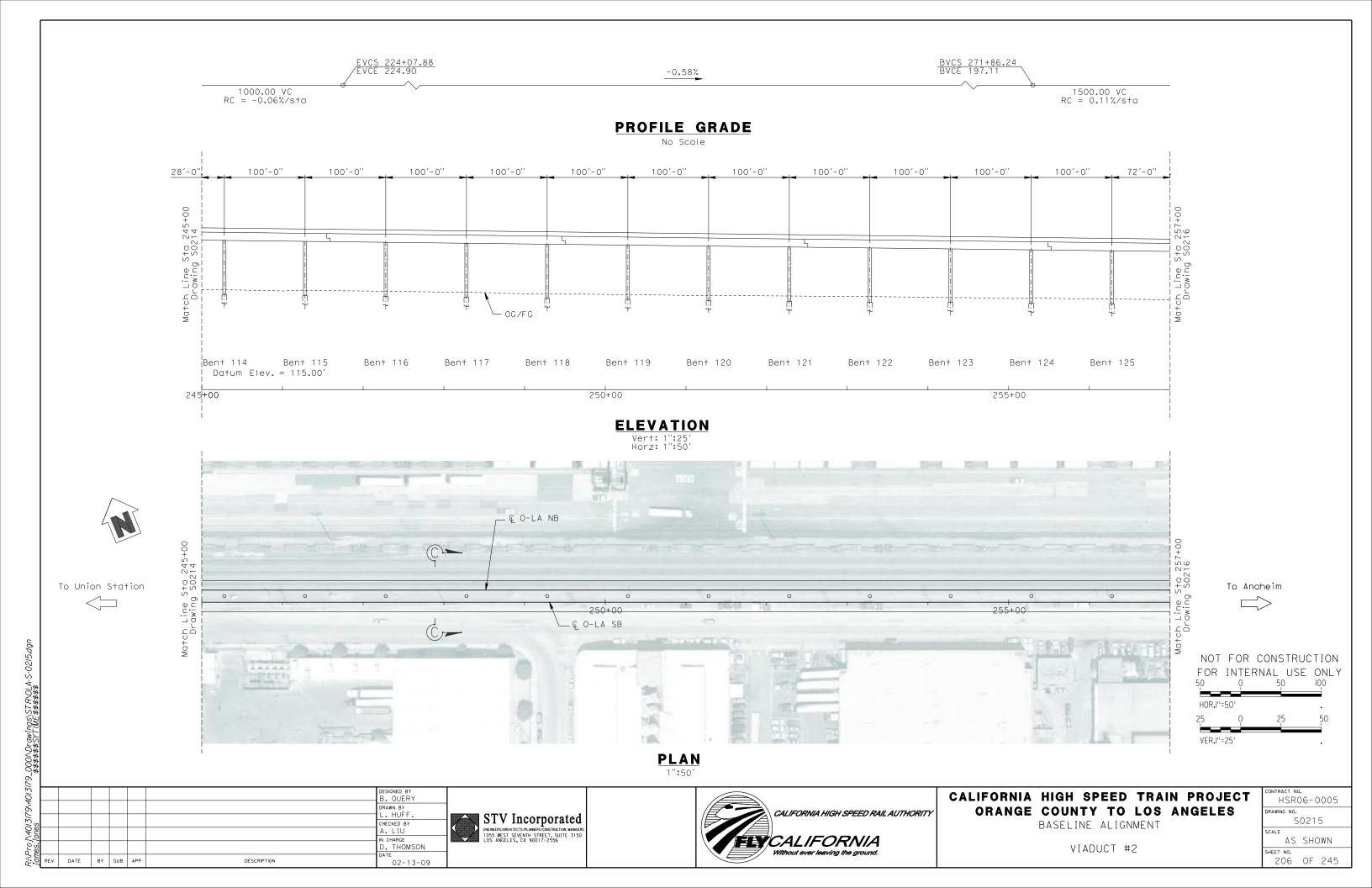
REV DATE BY SUB APP

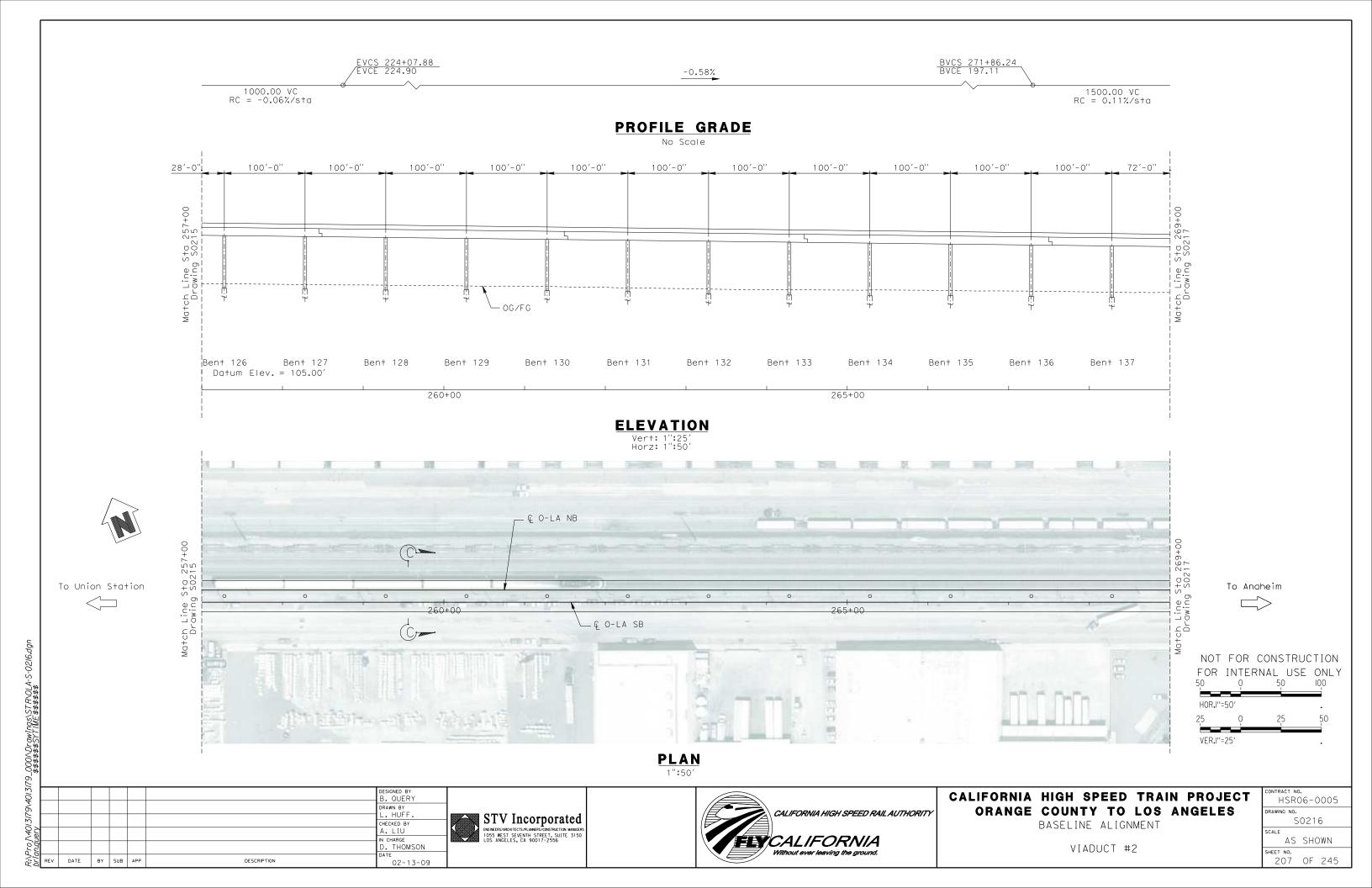
DESCRIPTION

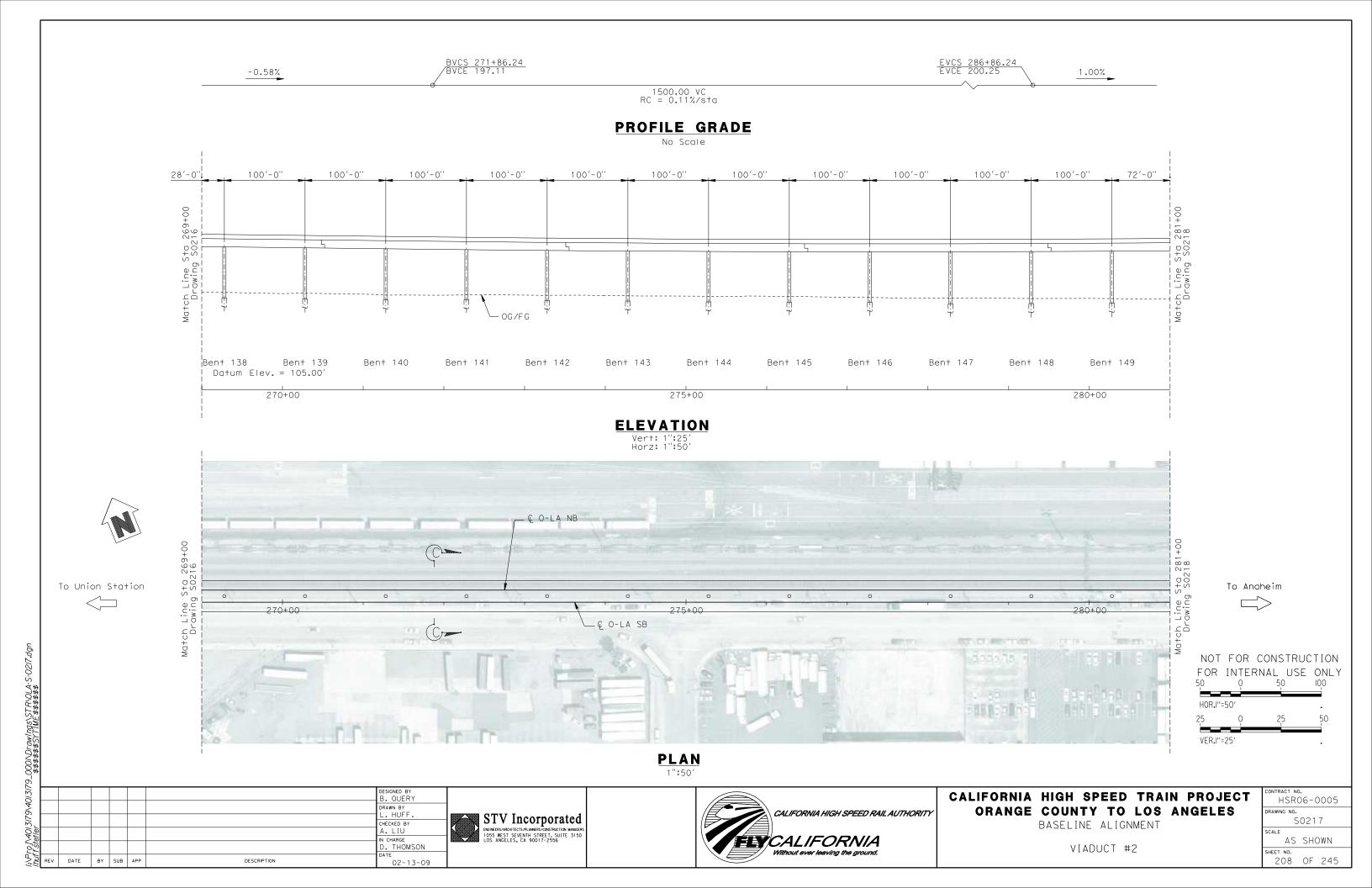
02-13-09

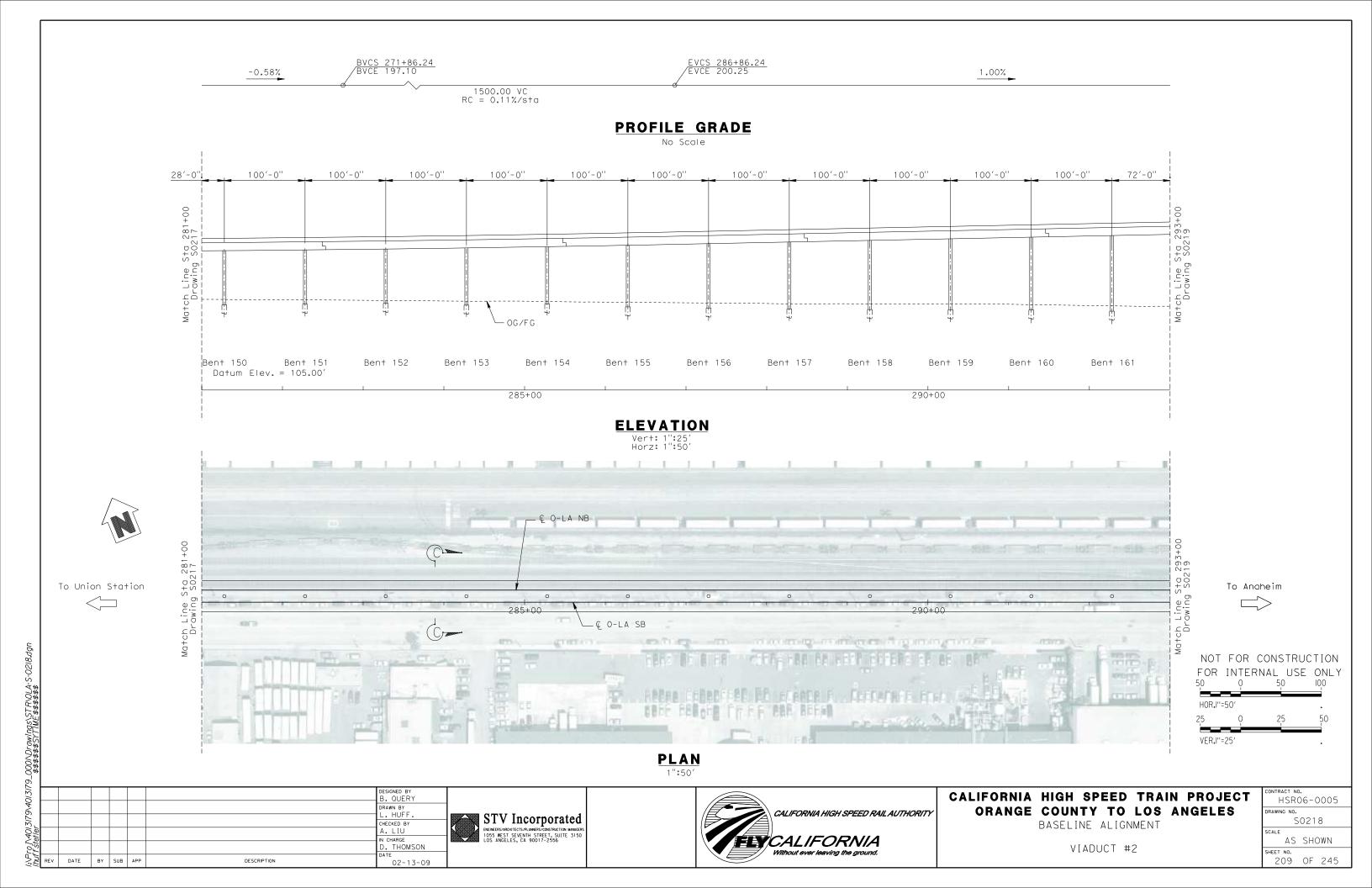


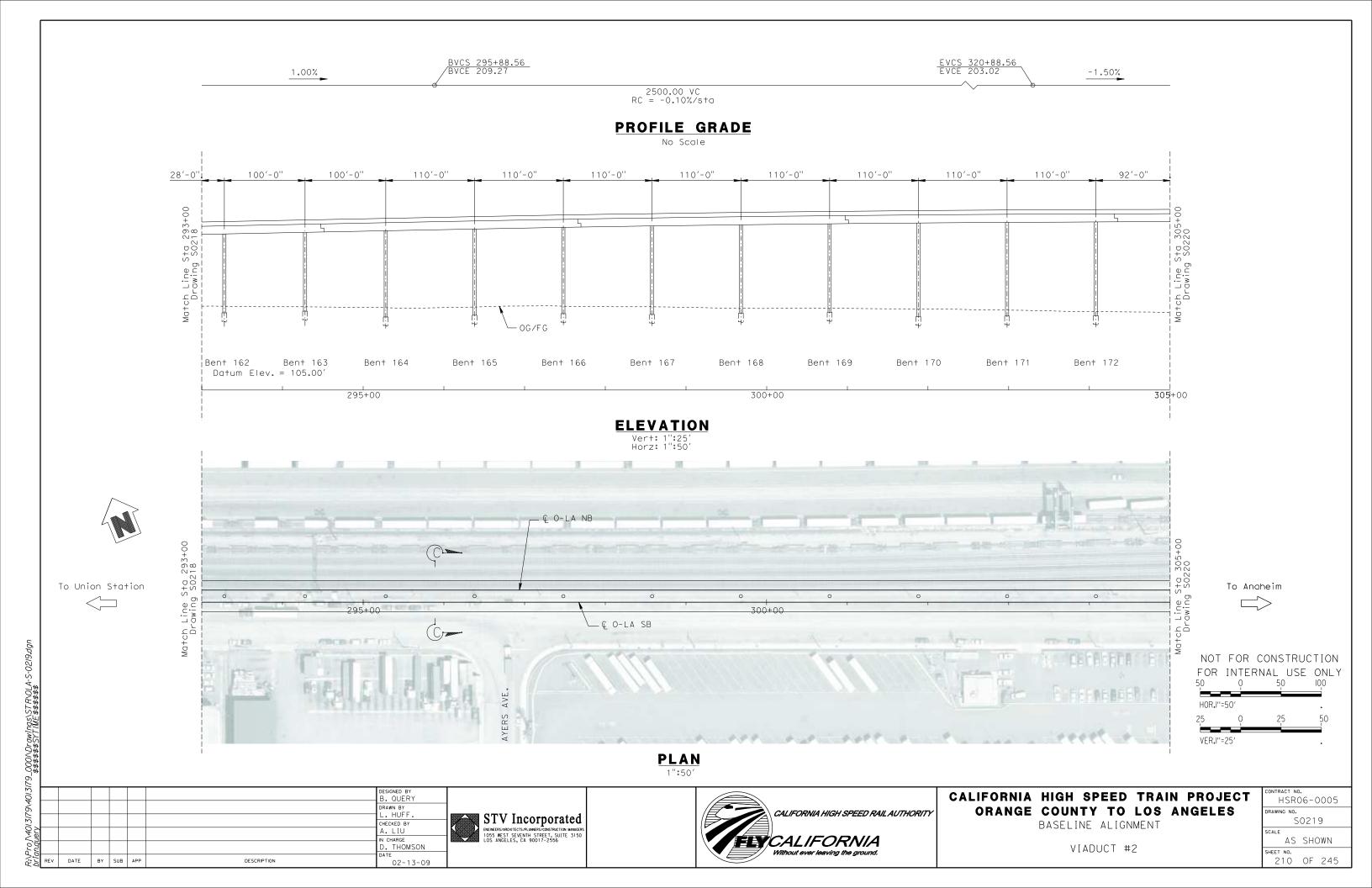


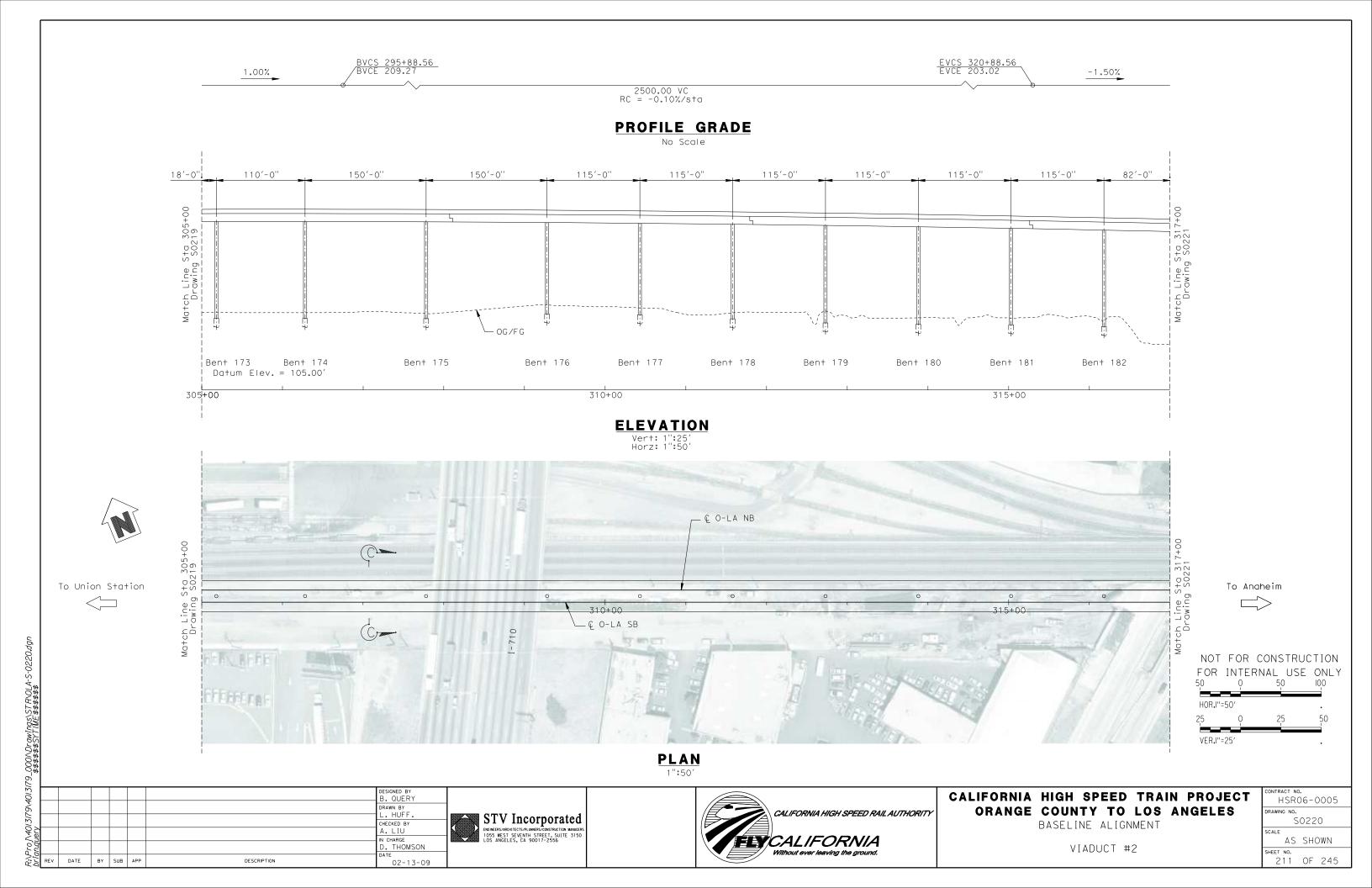


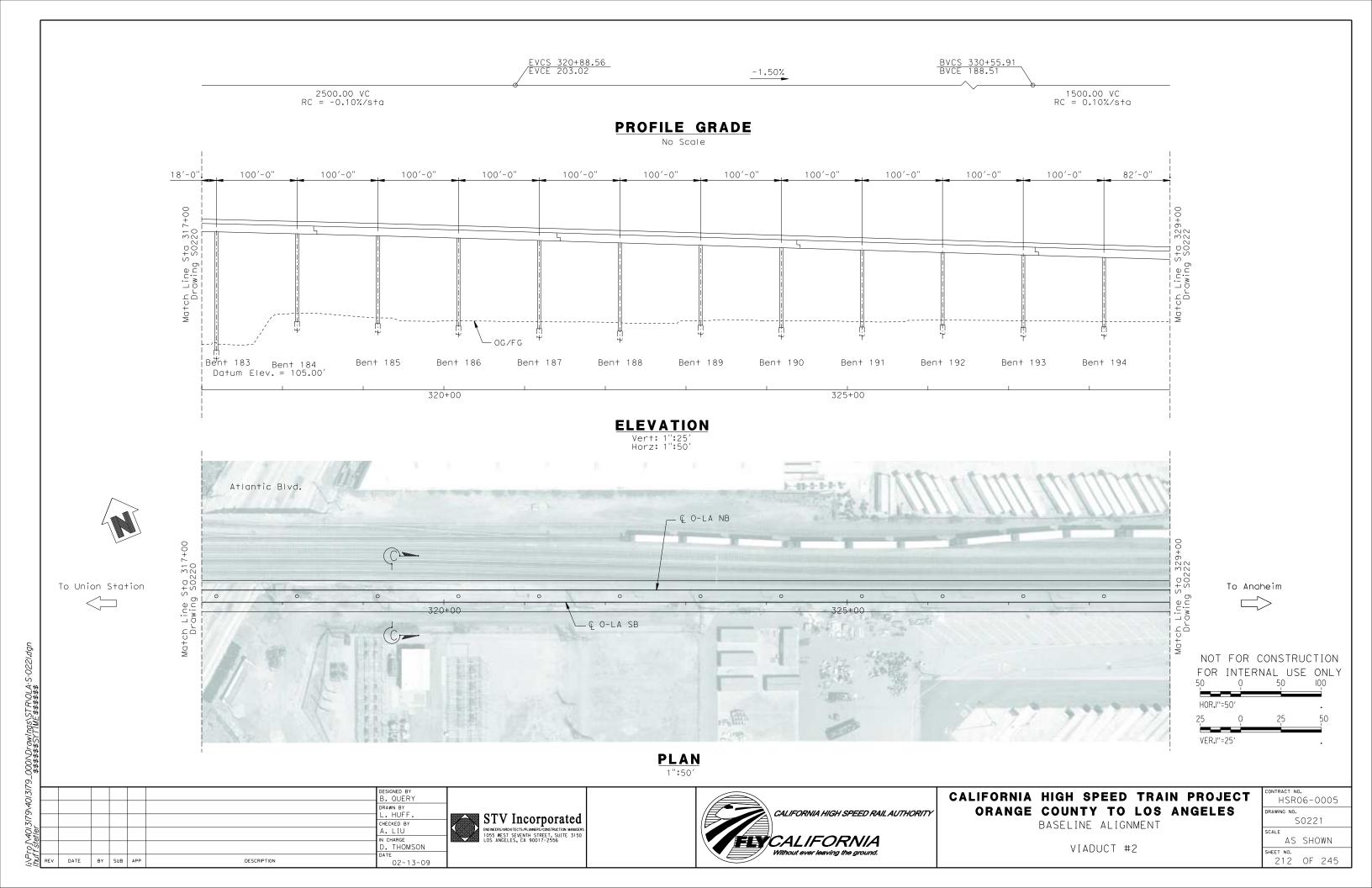


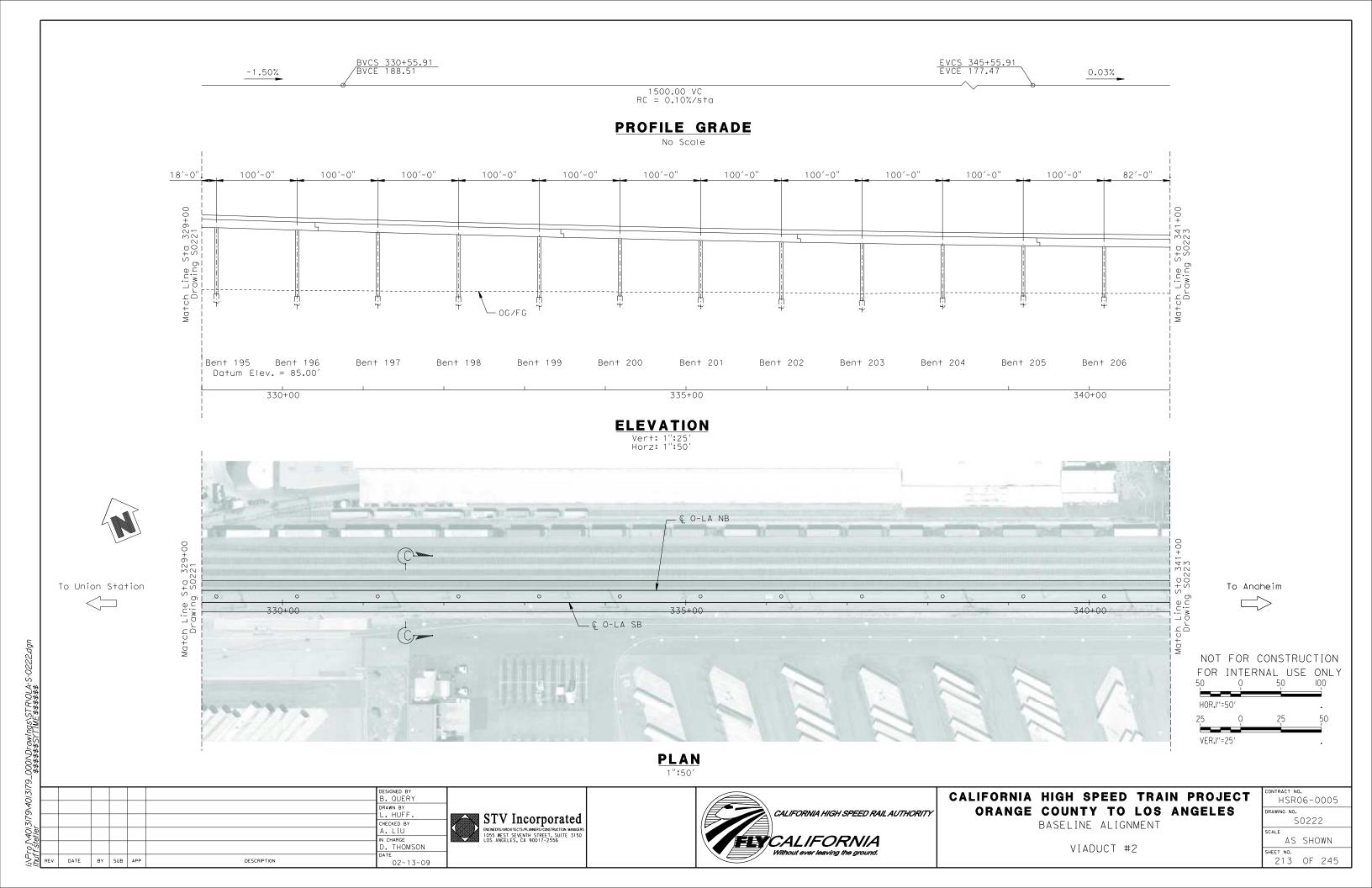


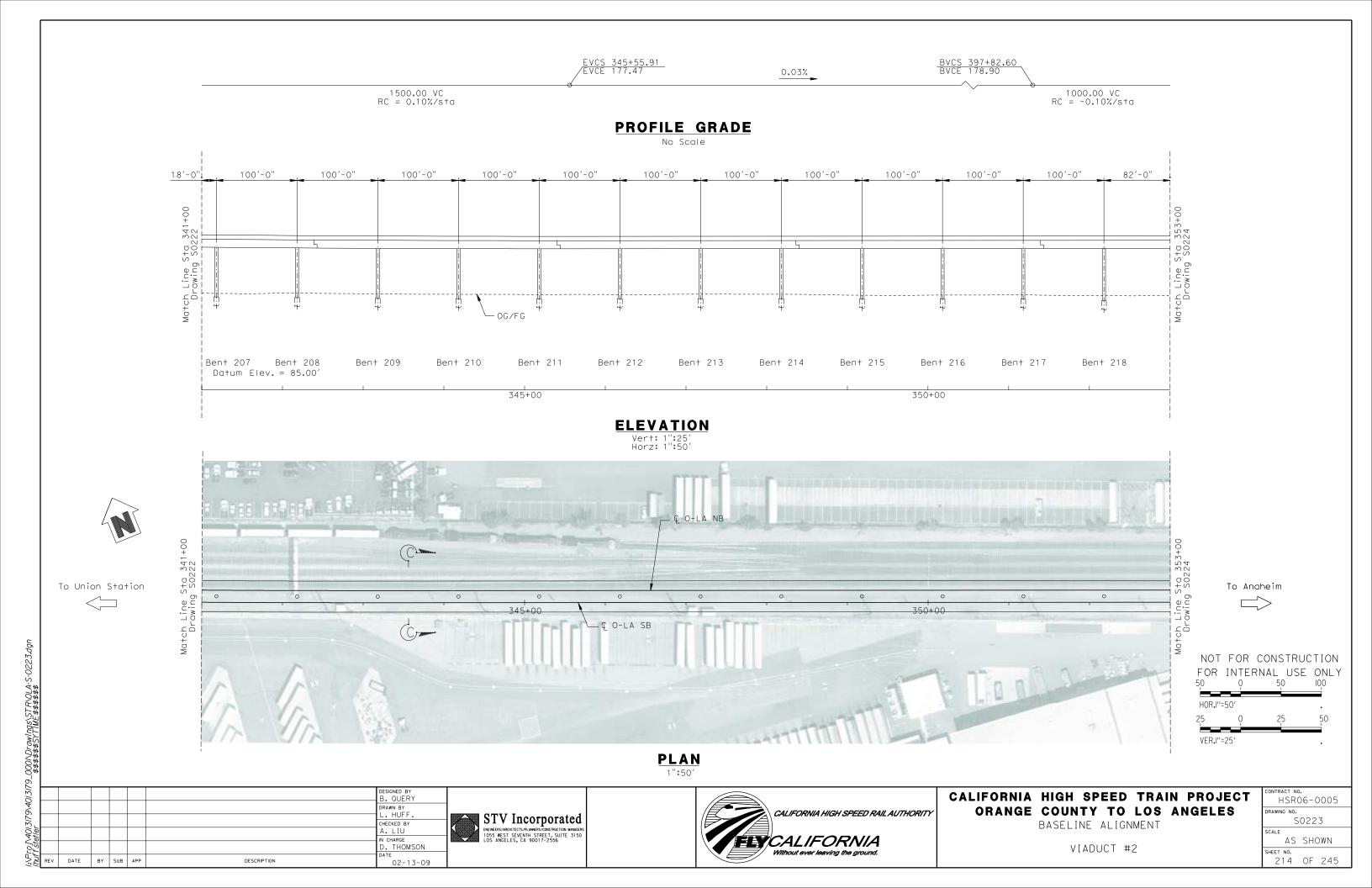


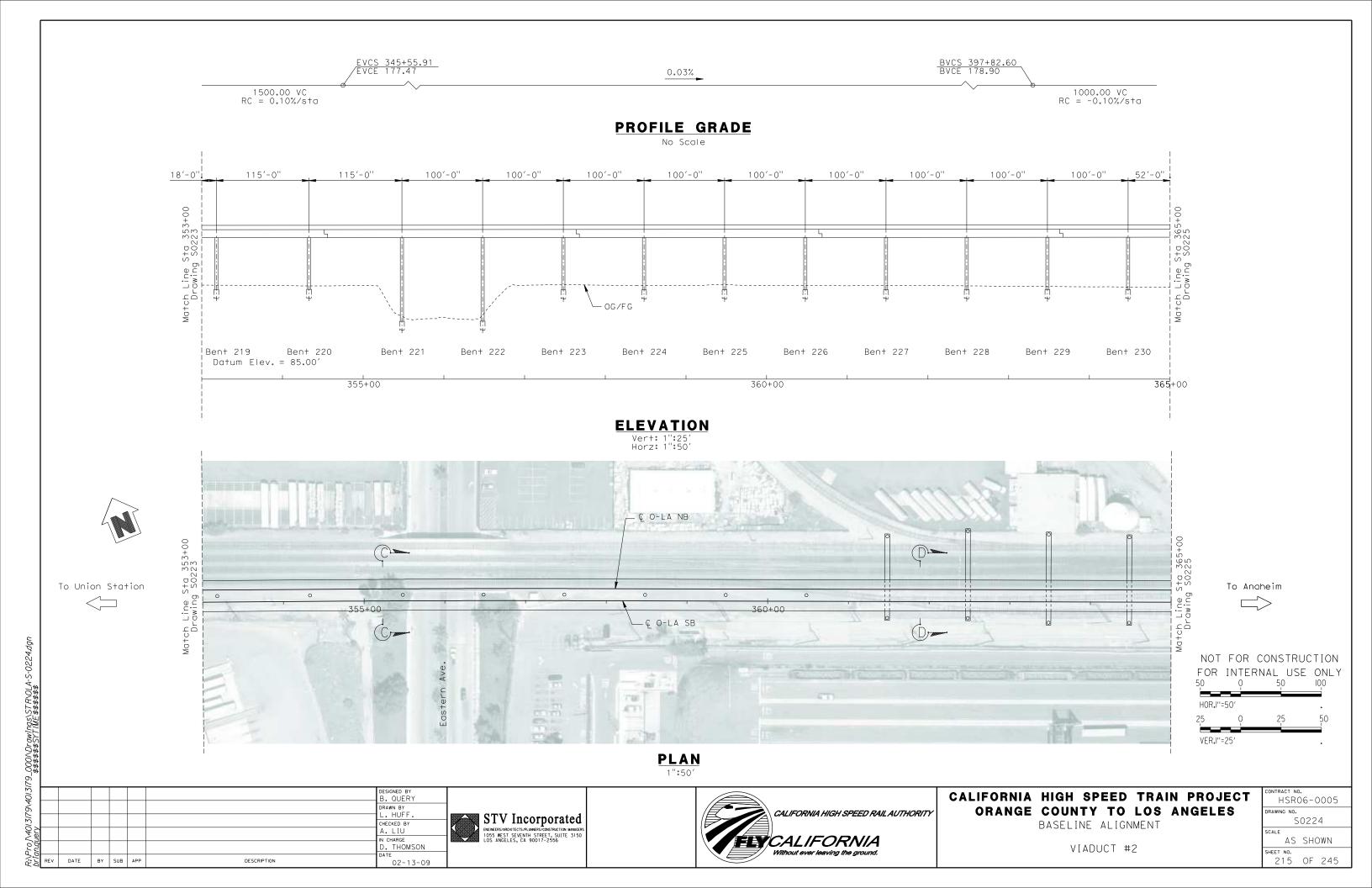


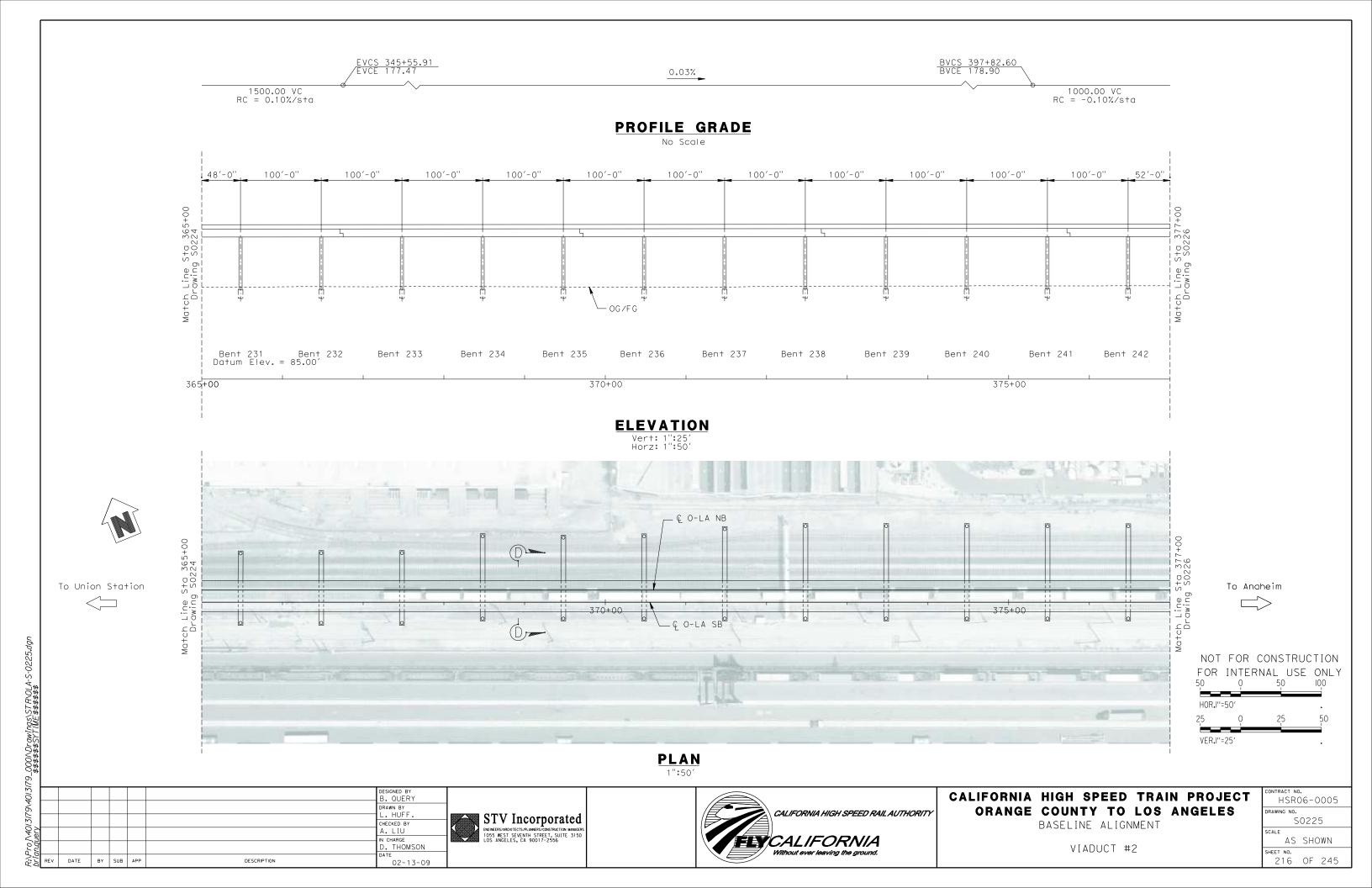


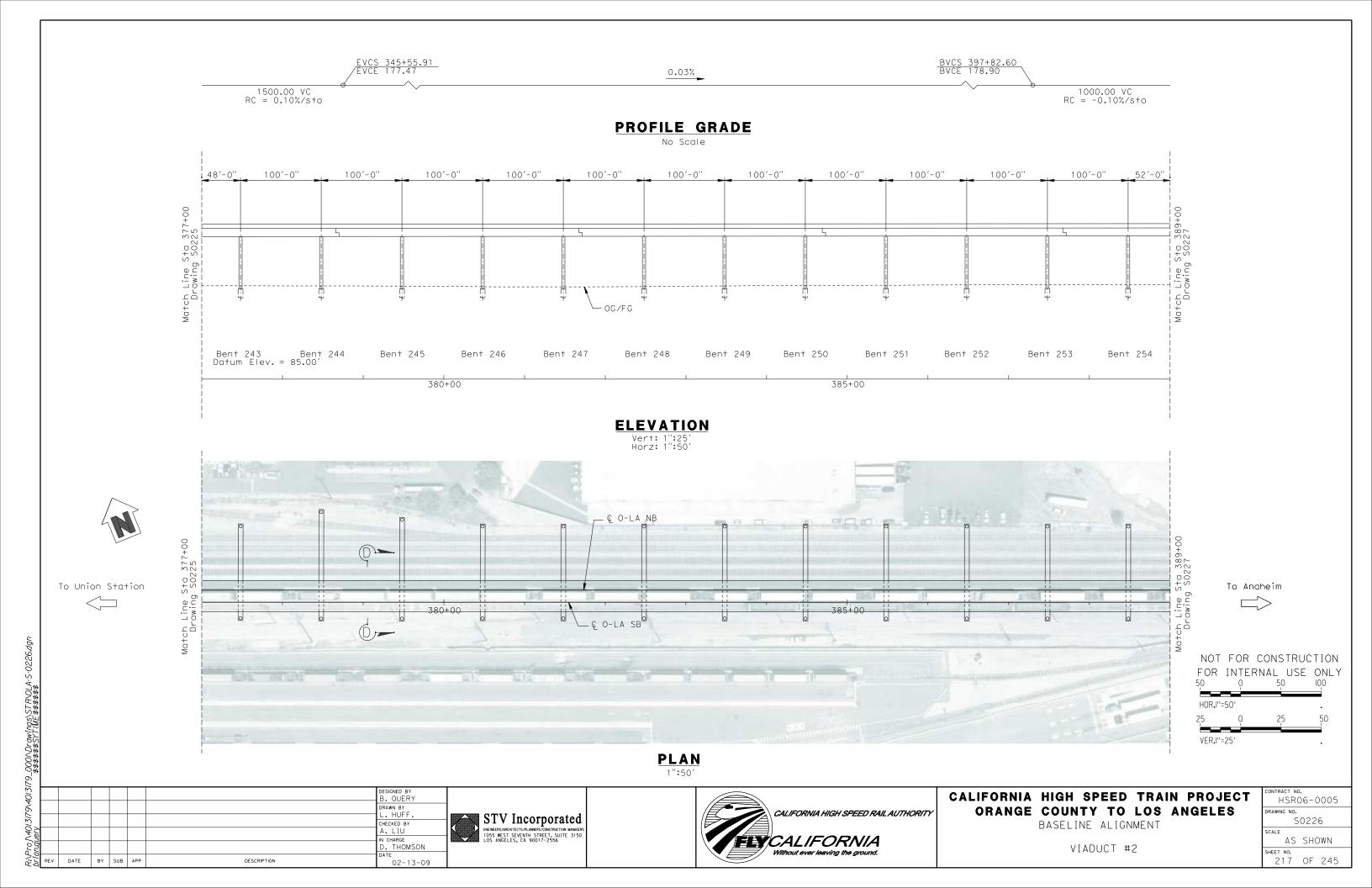


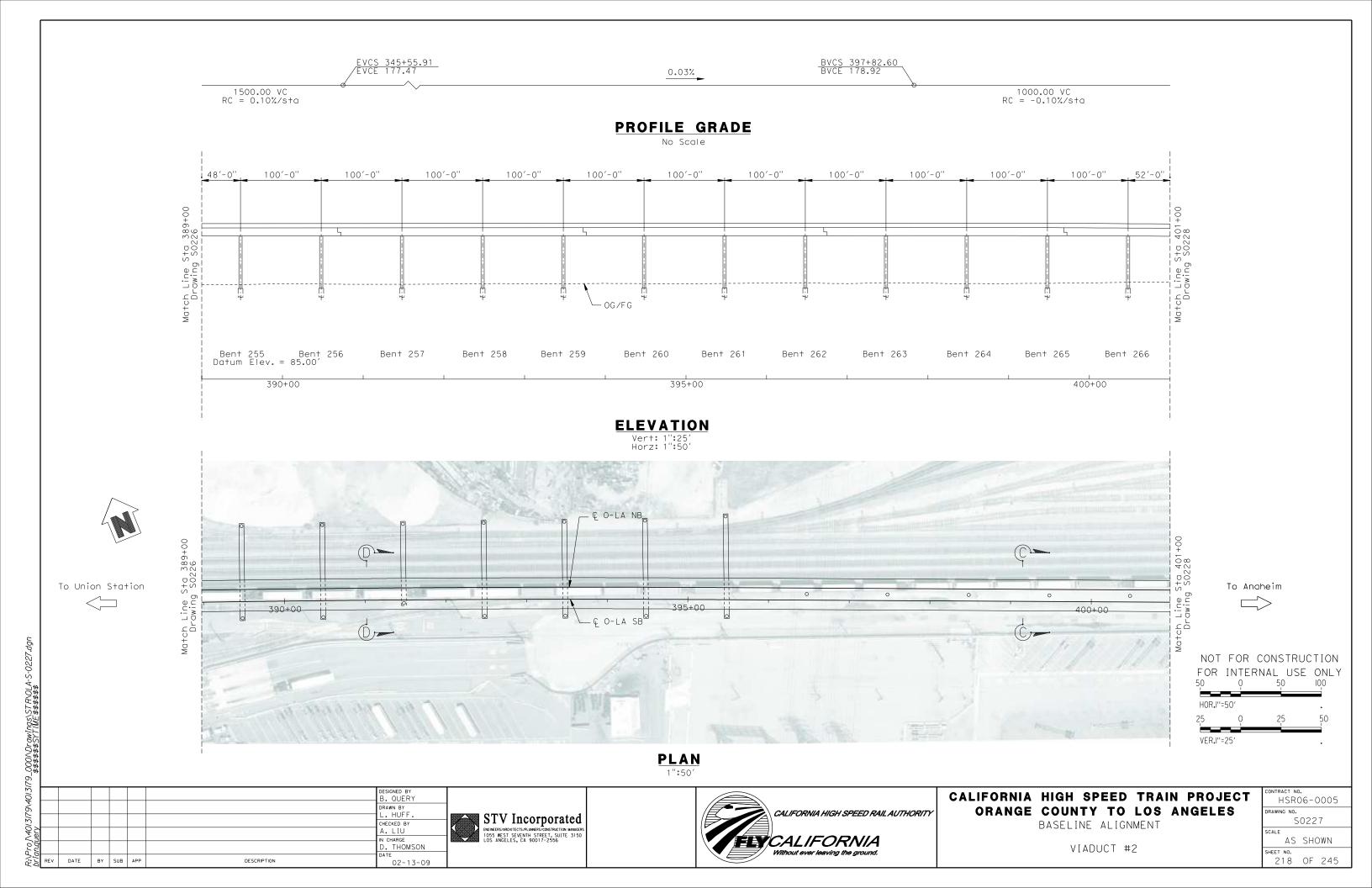


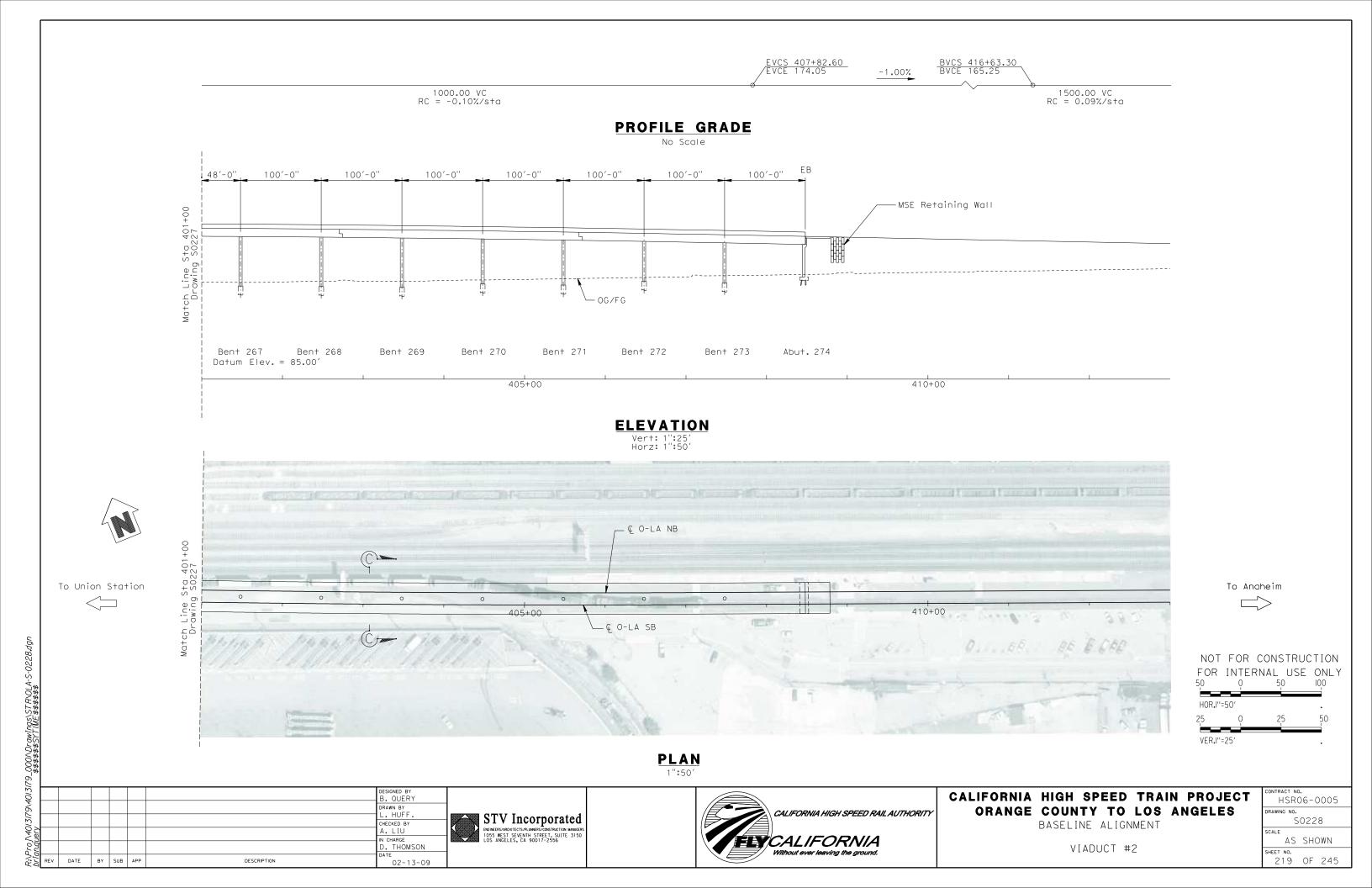


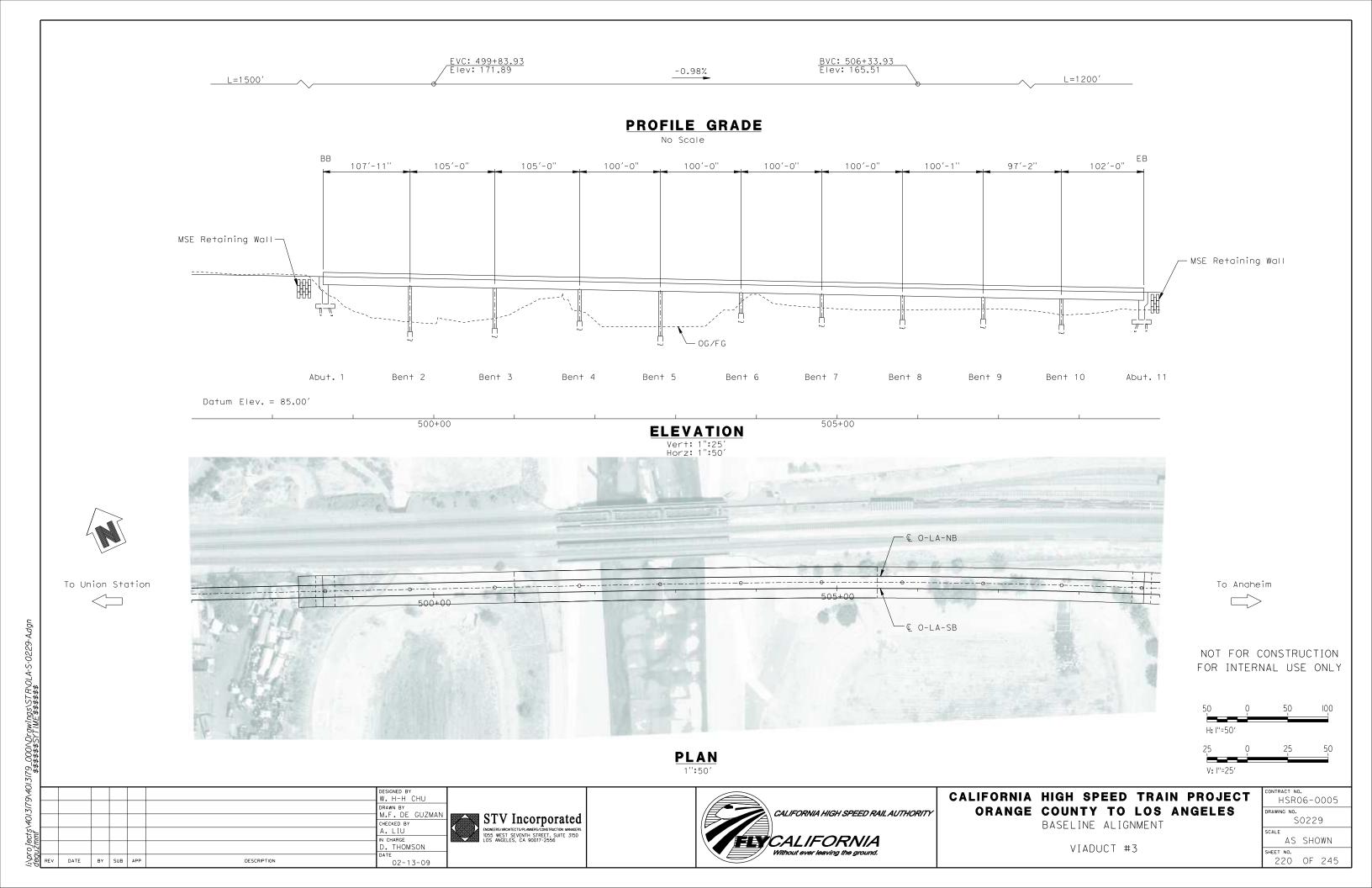


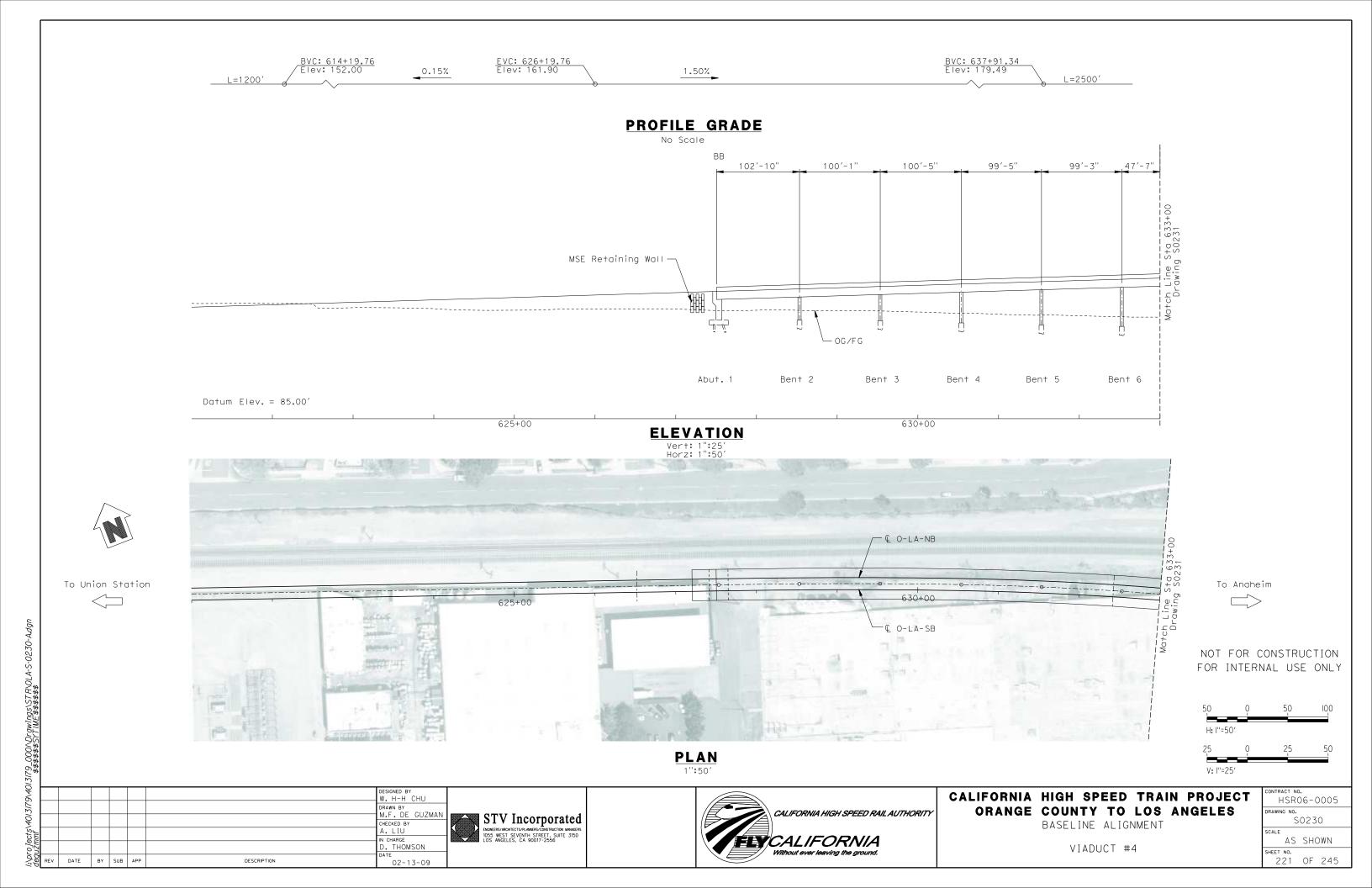


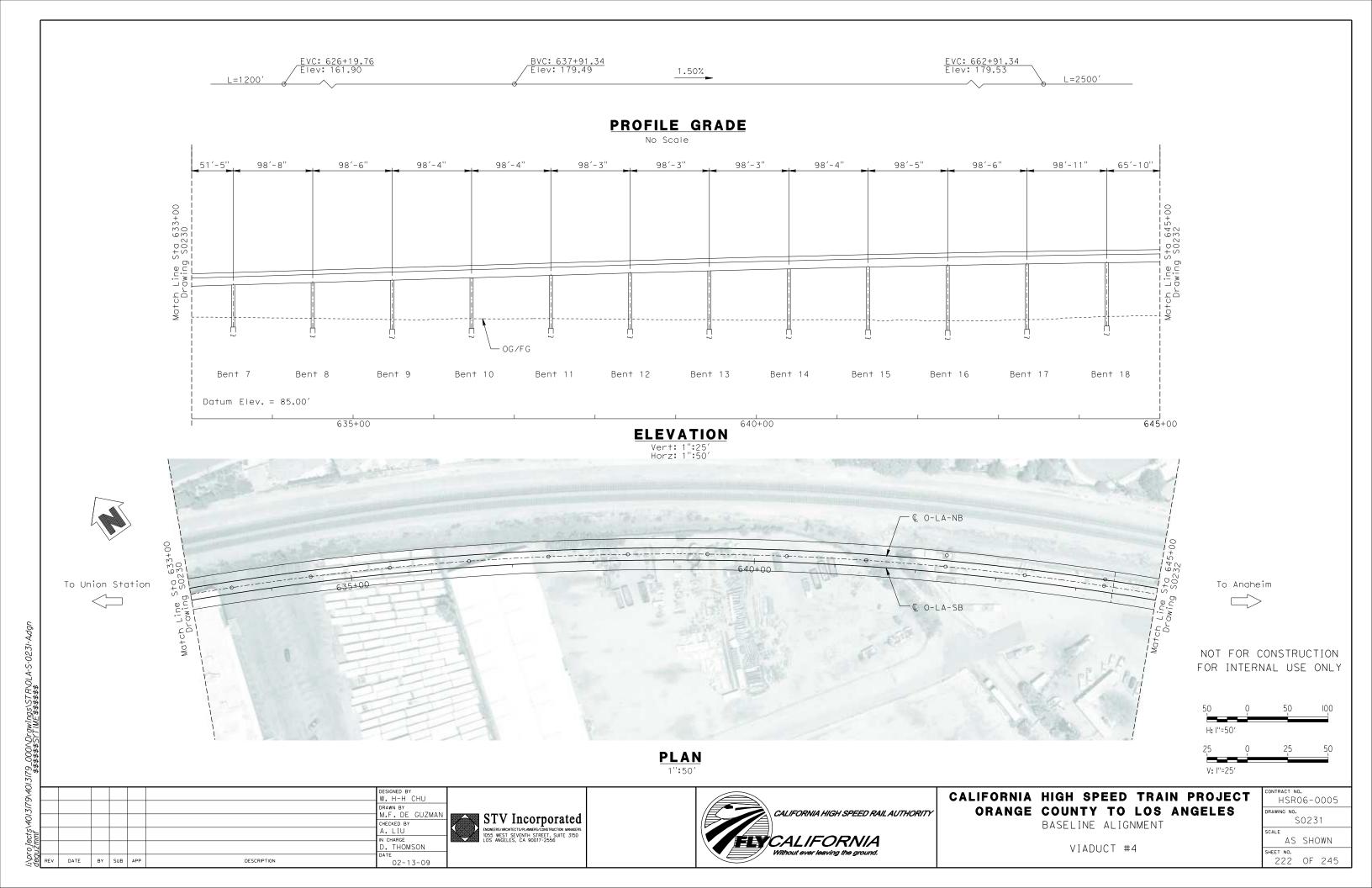


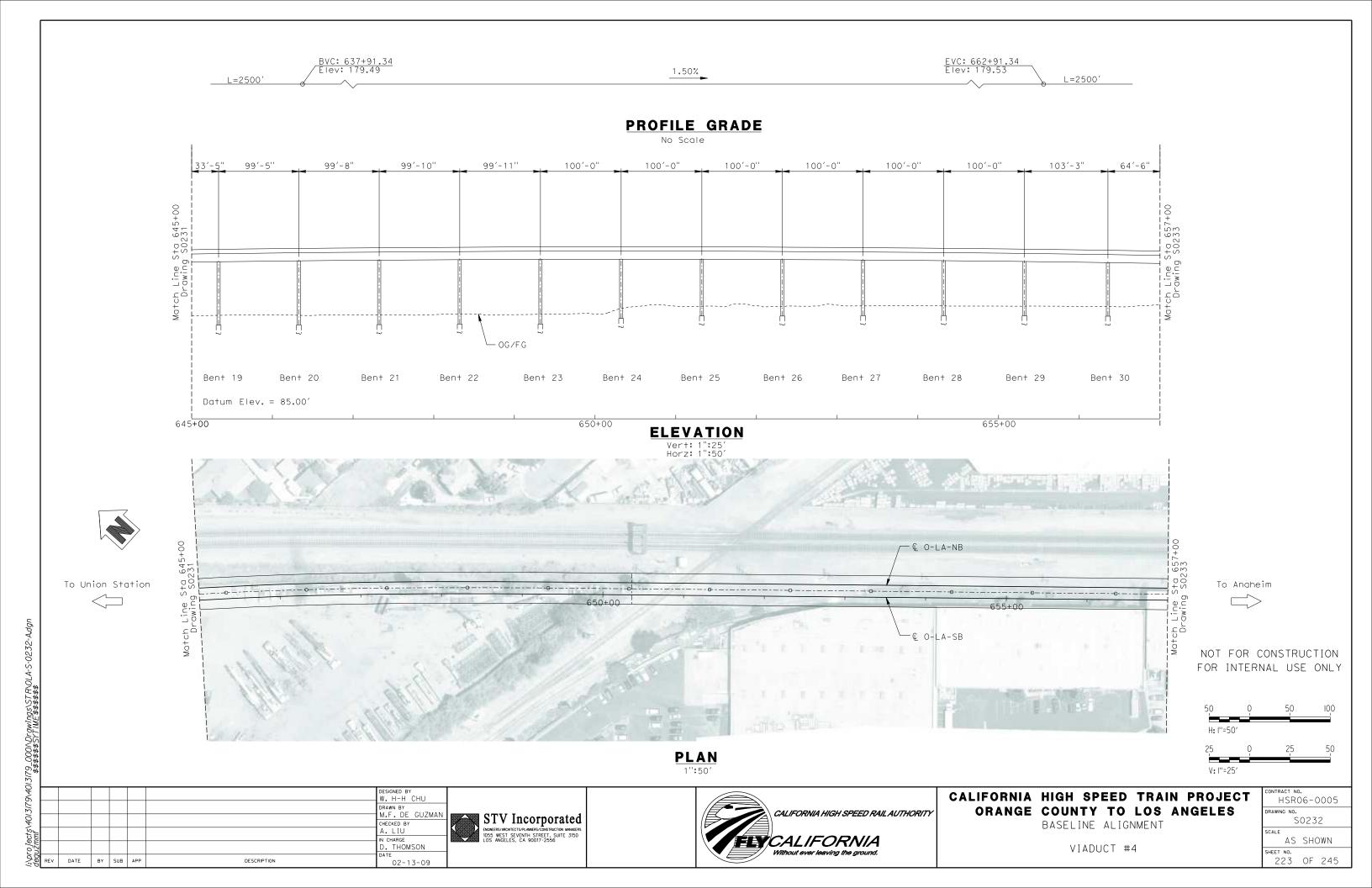


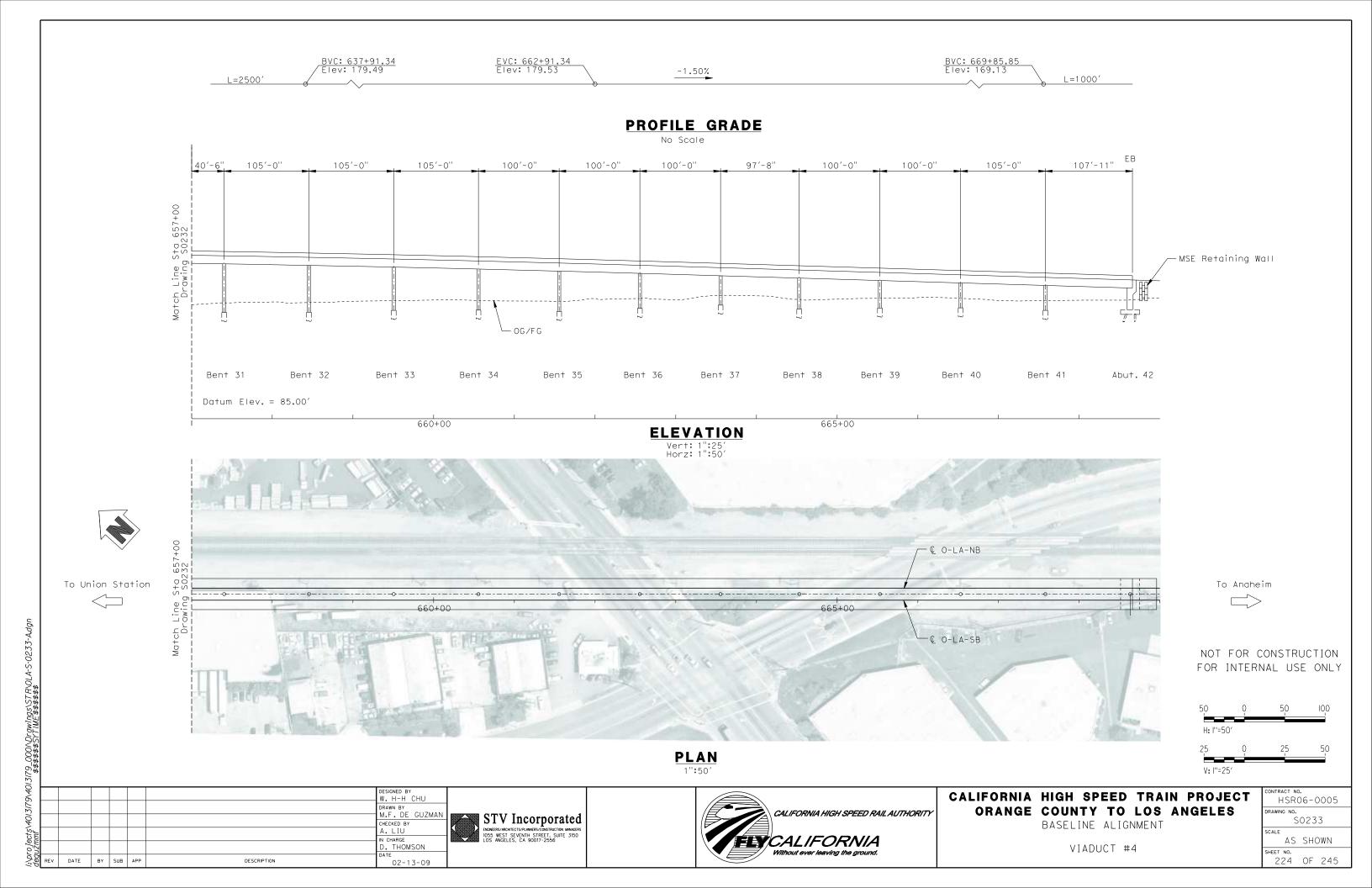


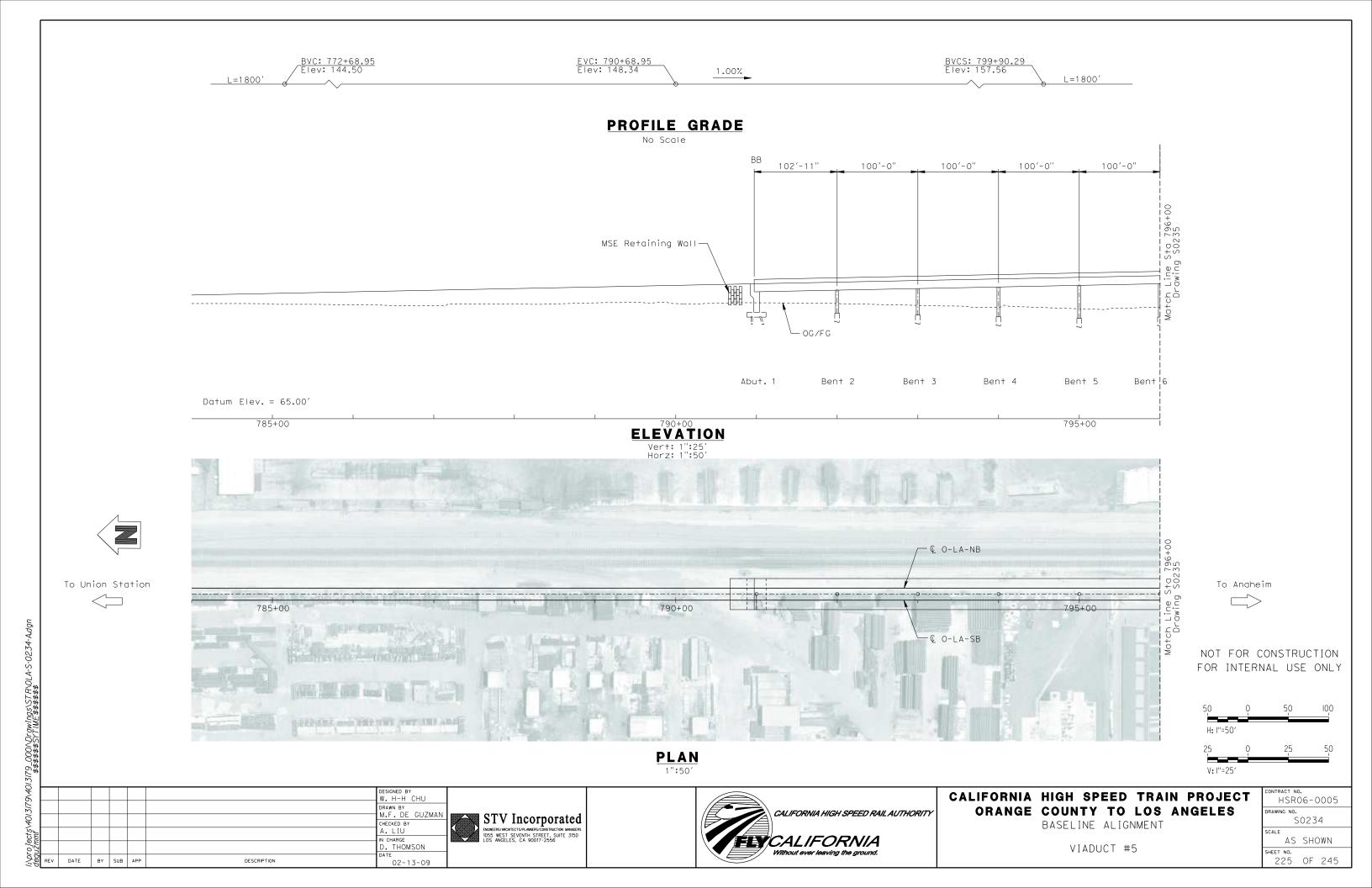


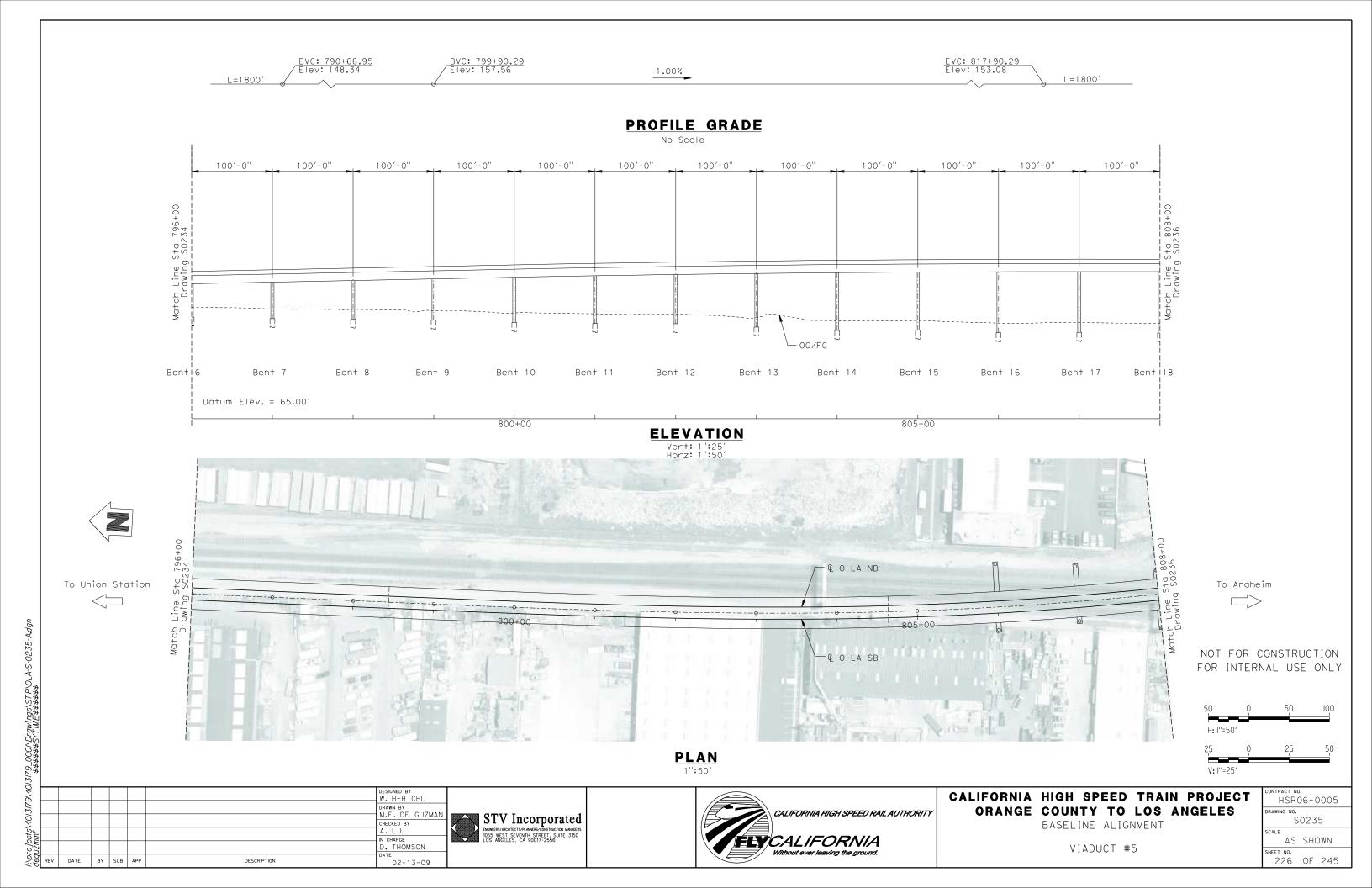


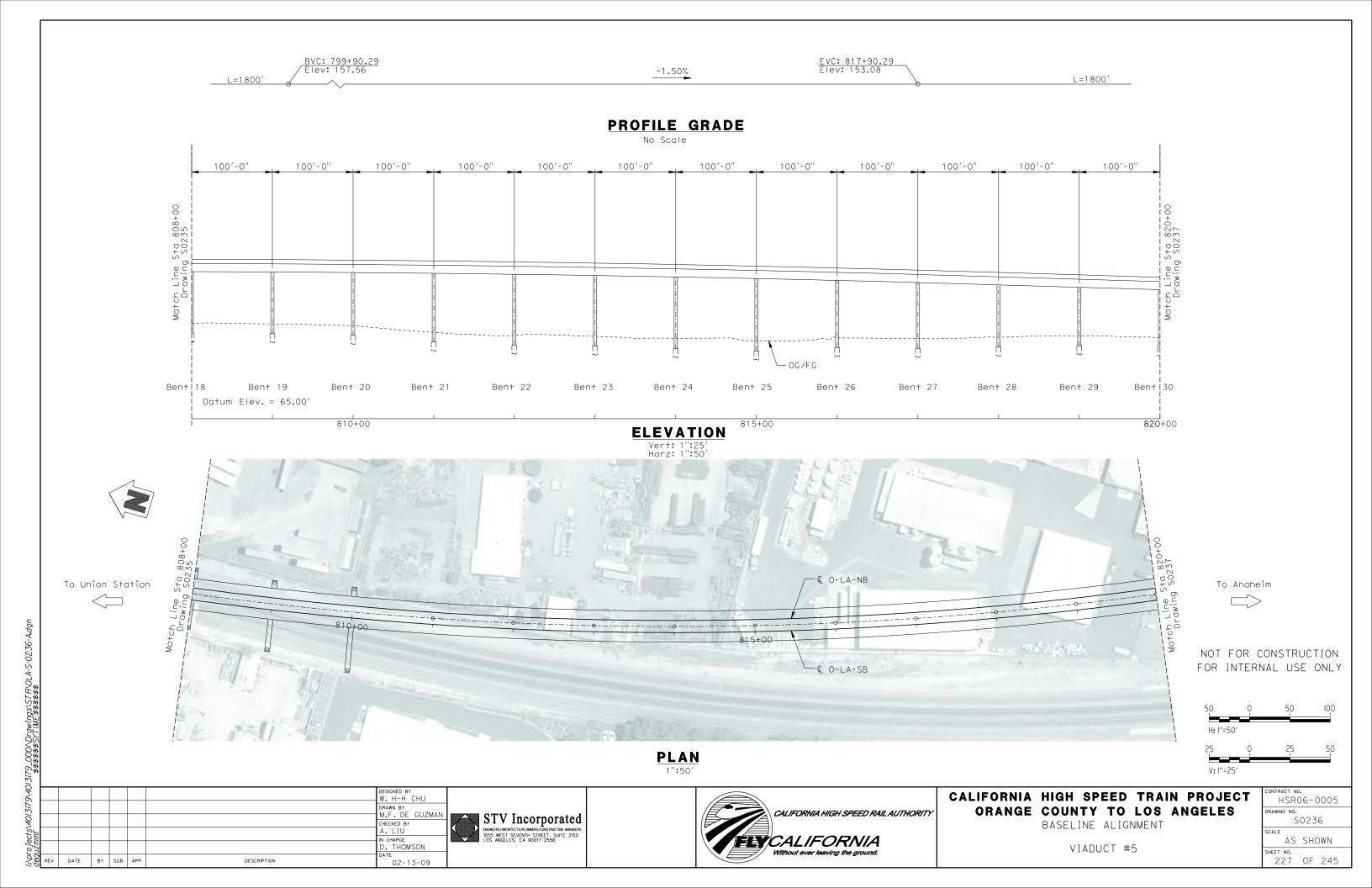


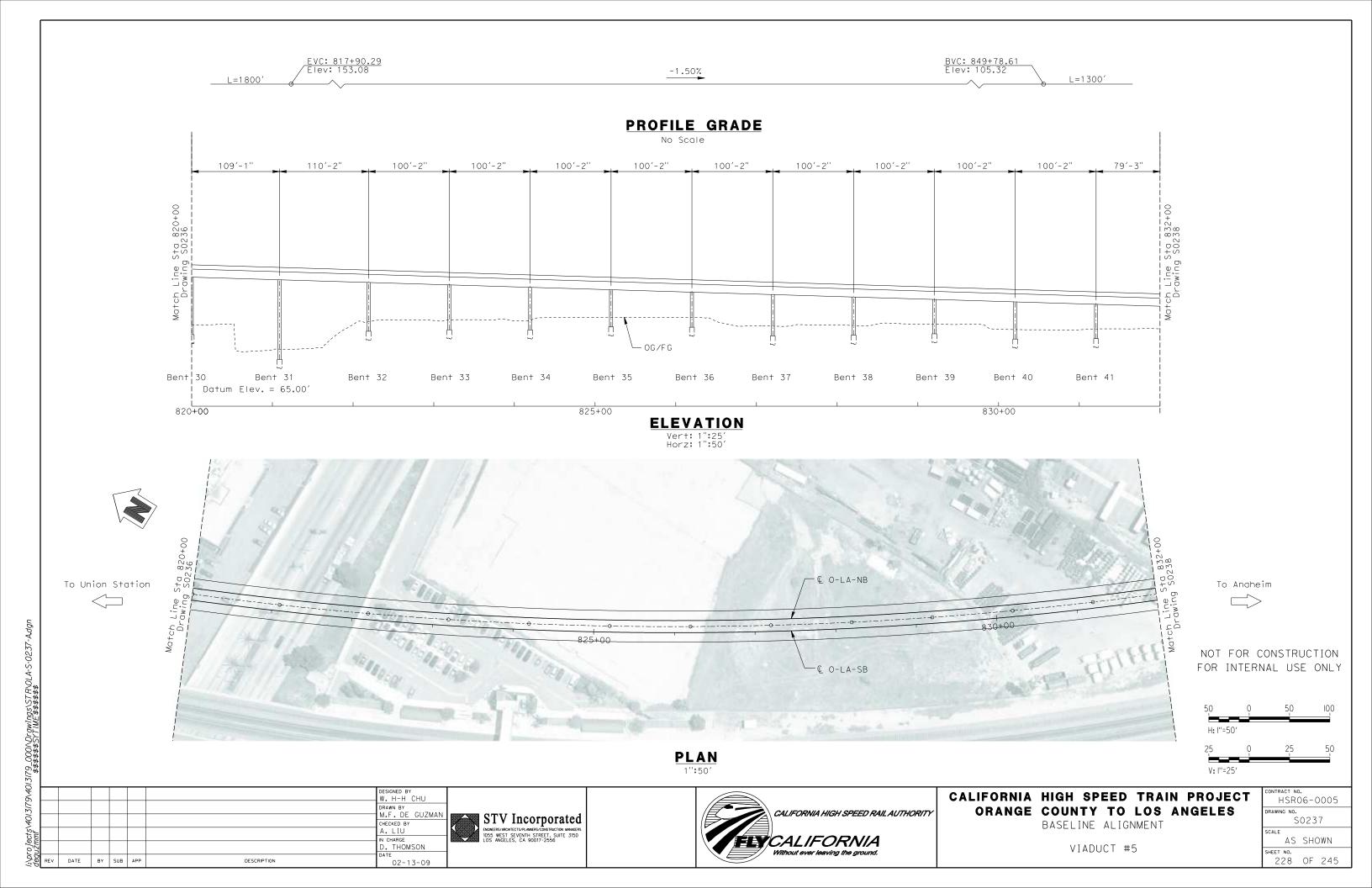


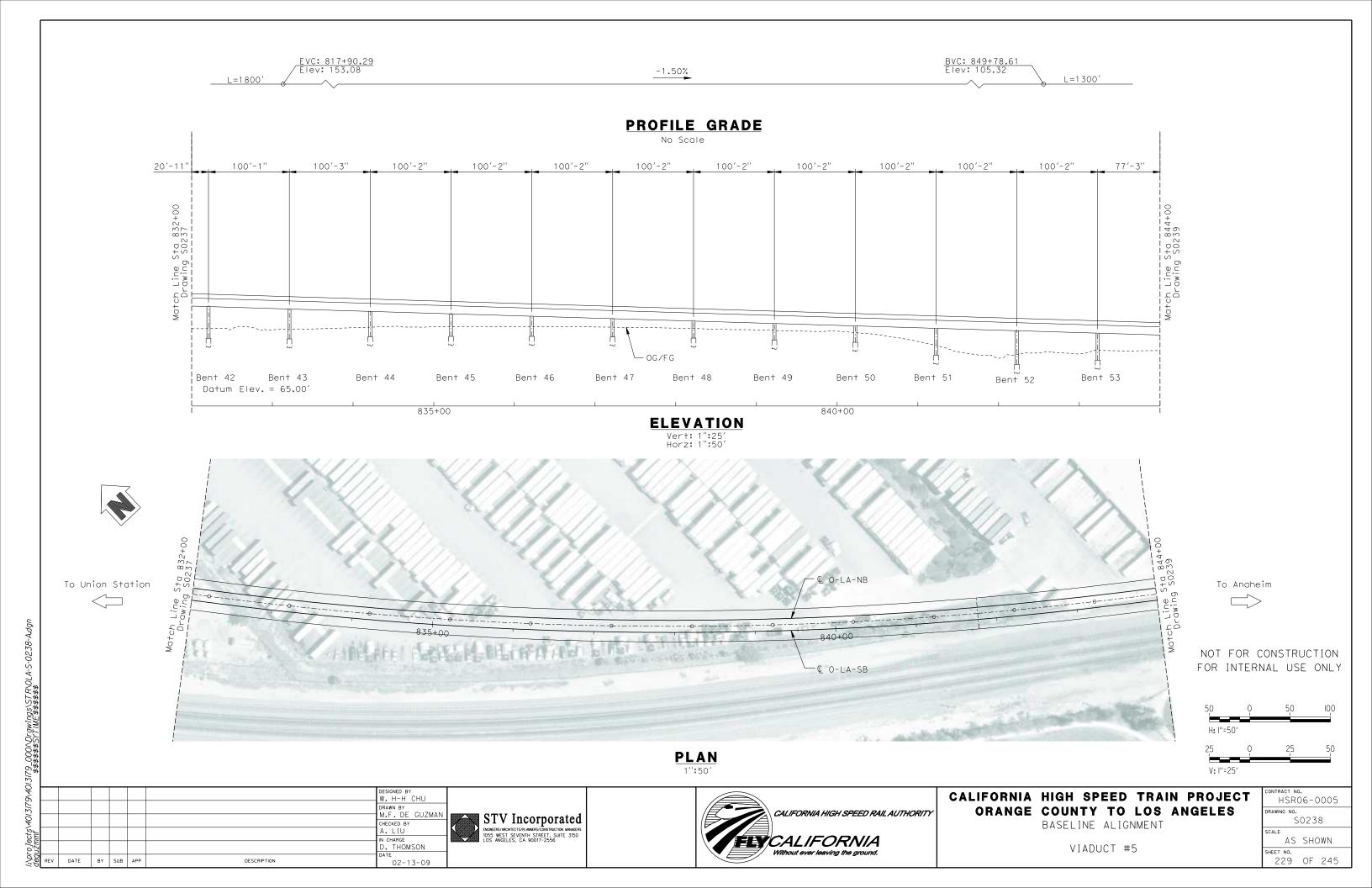


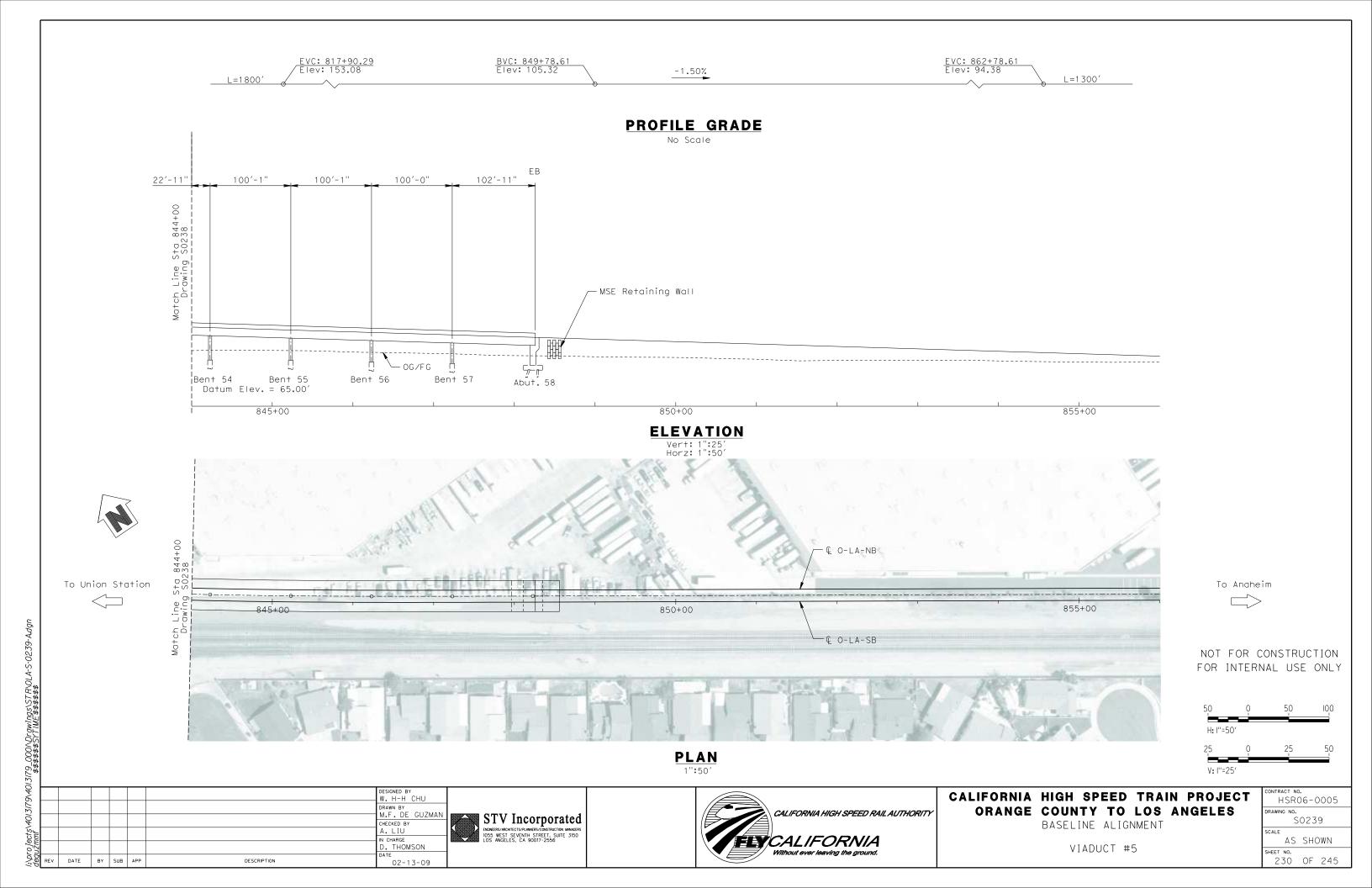


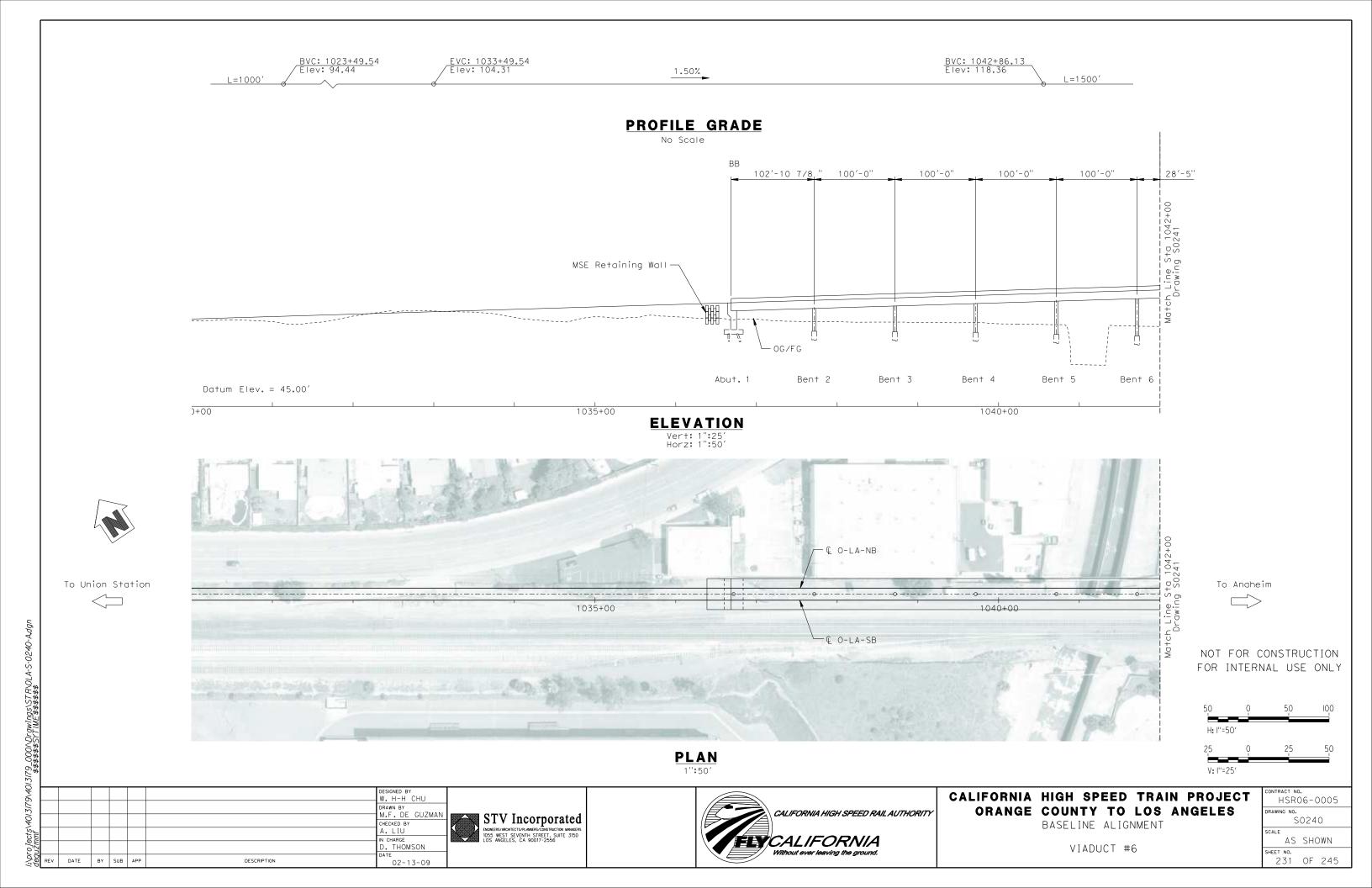


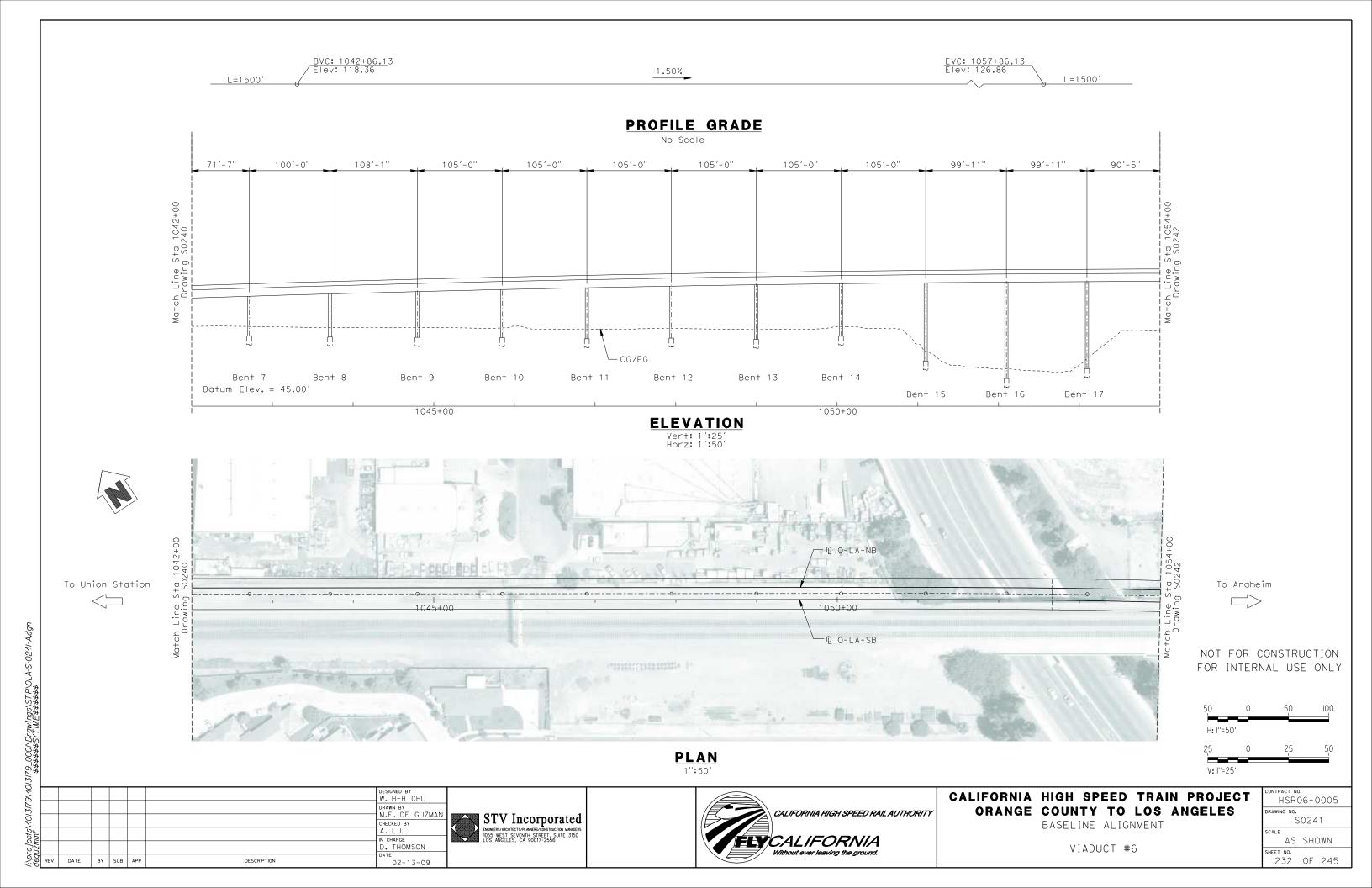


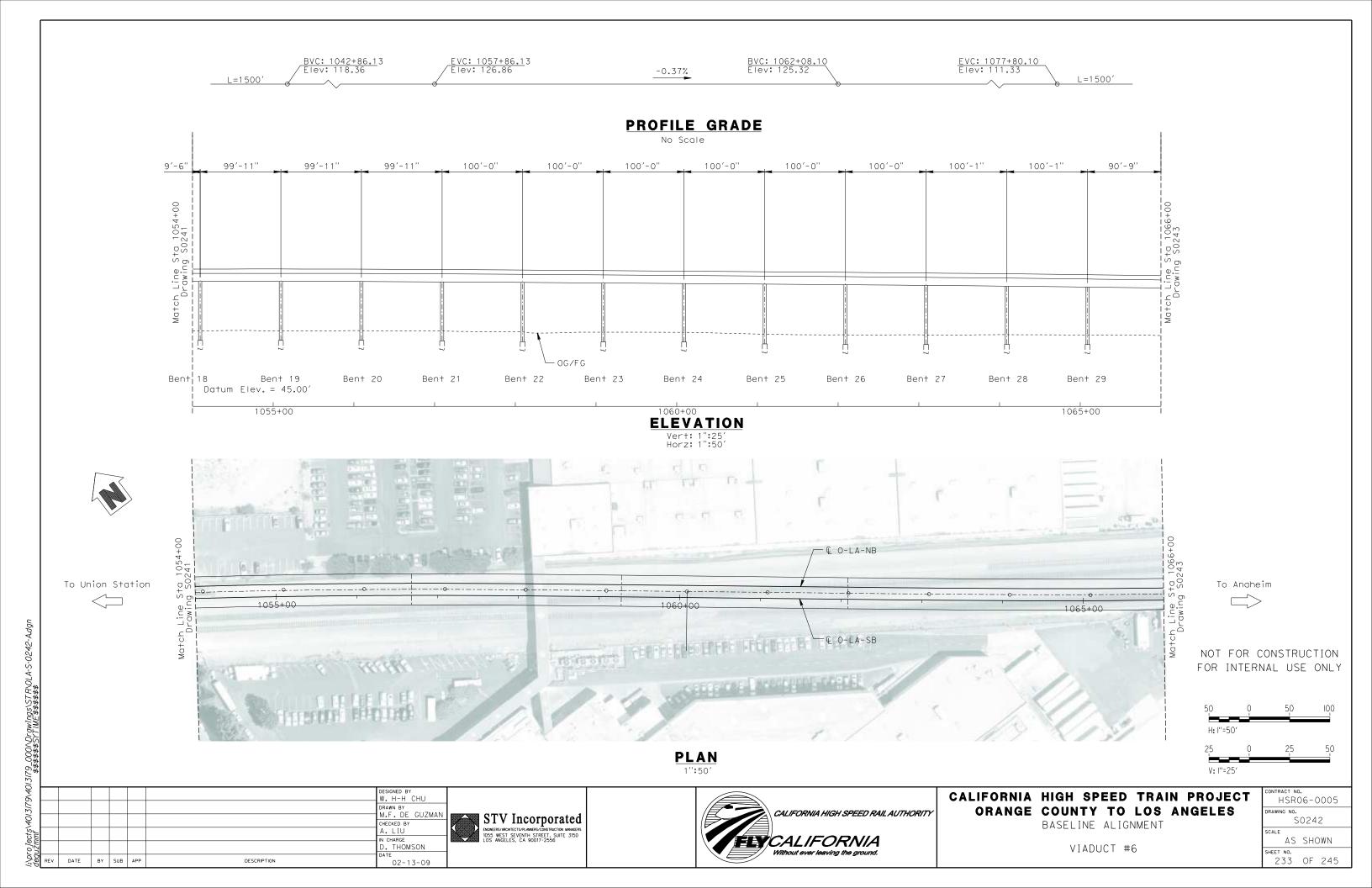


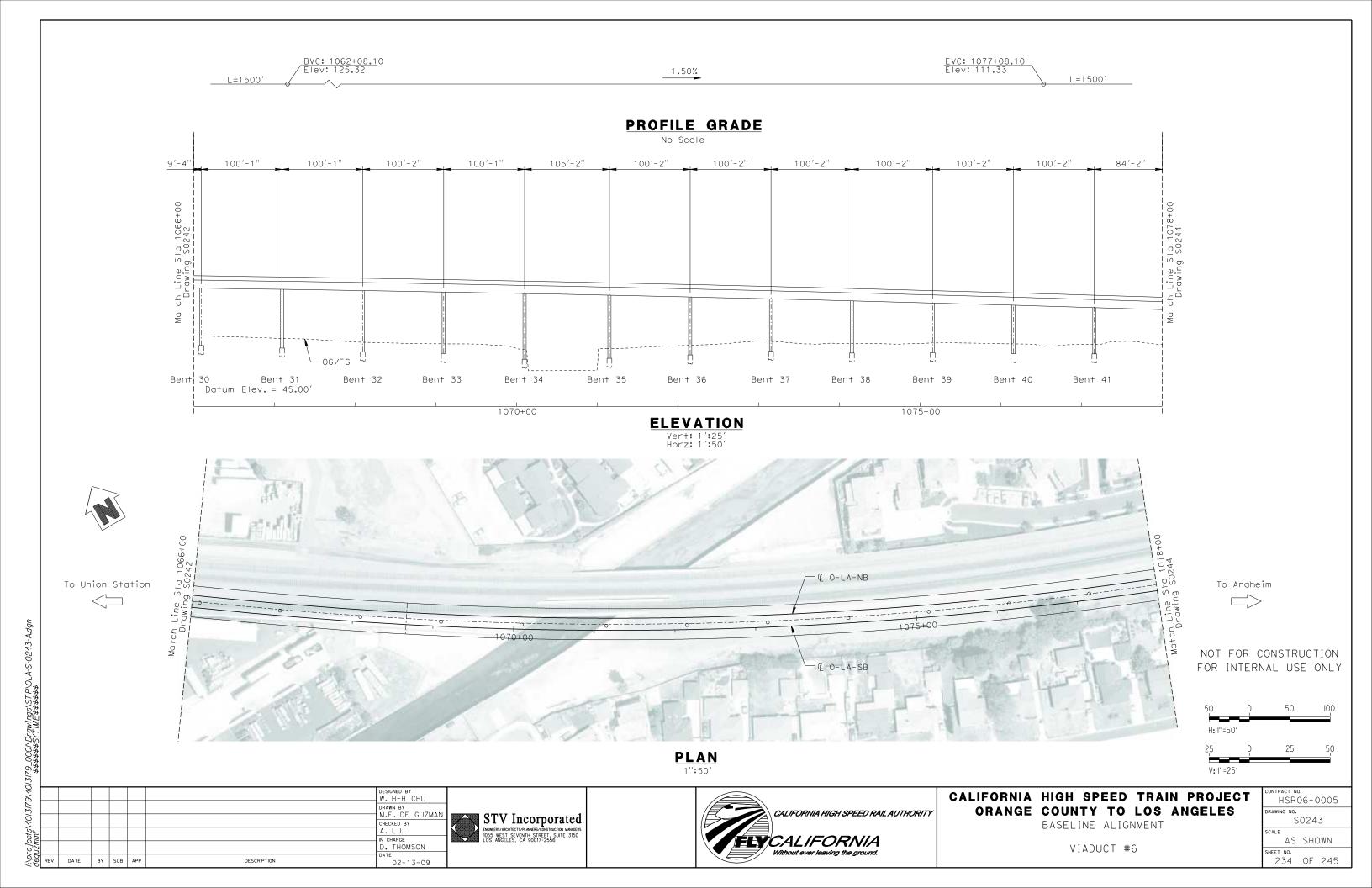


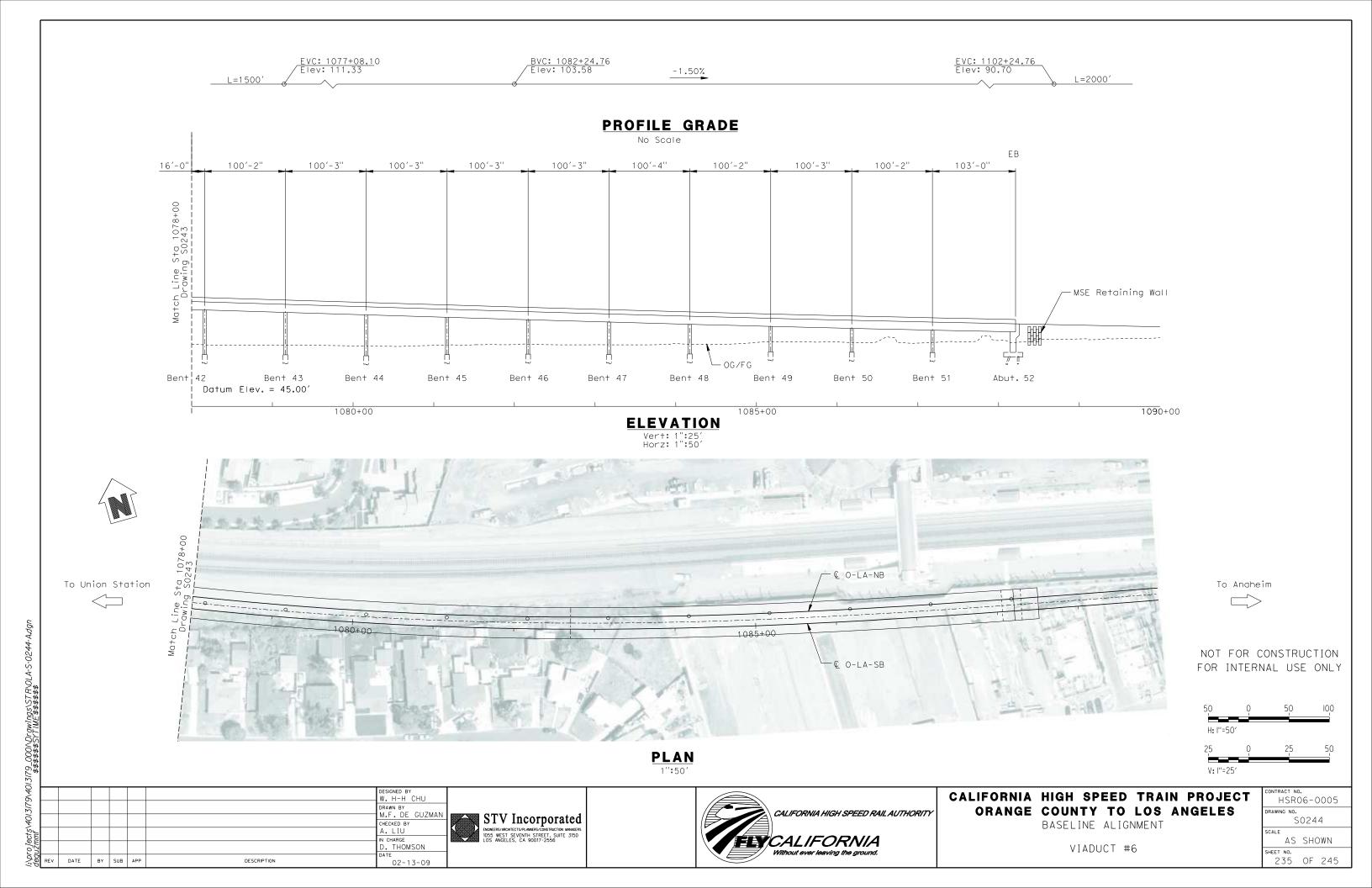


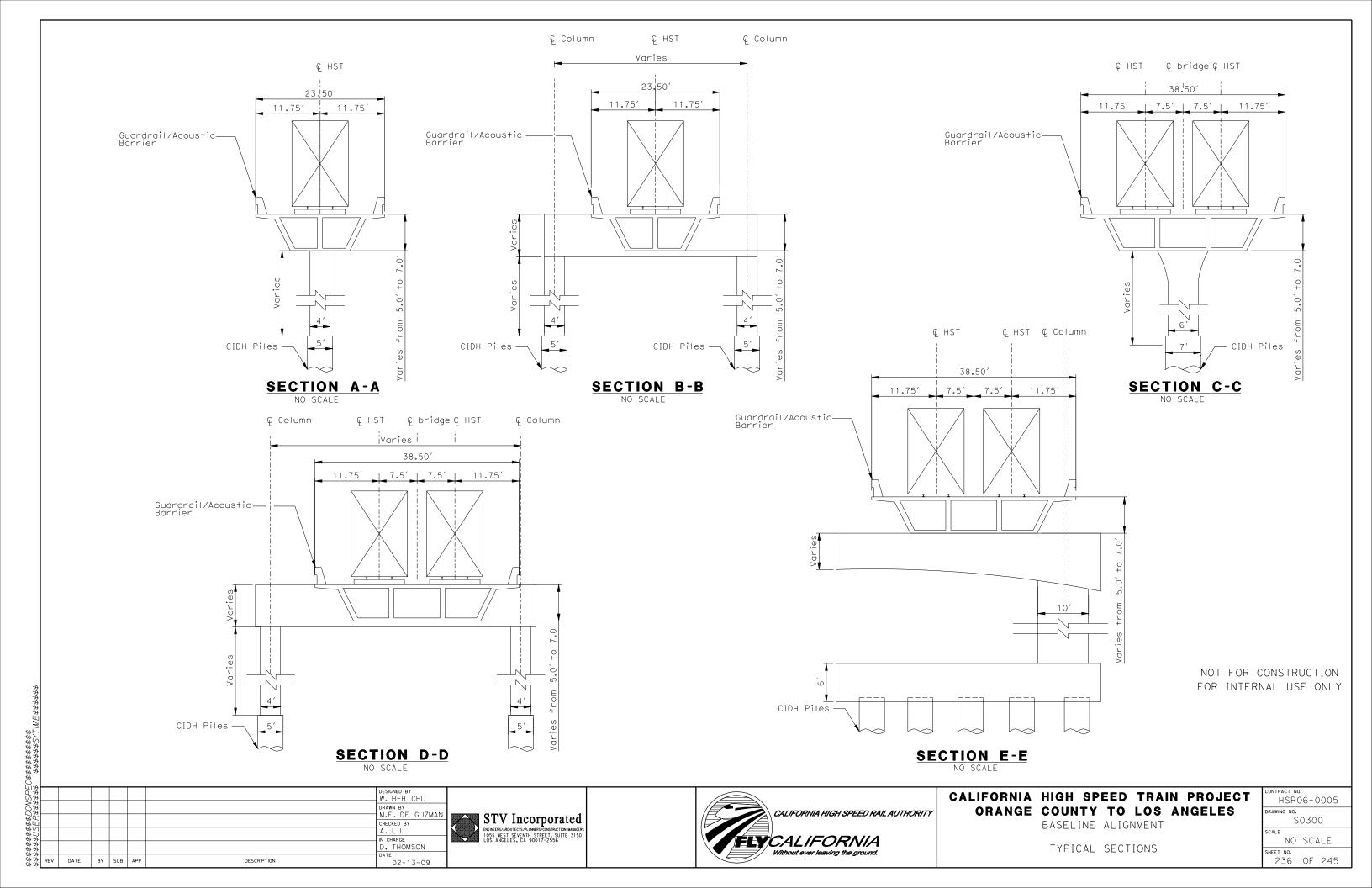


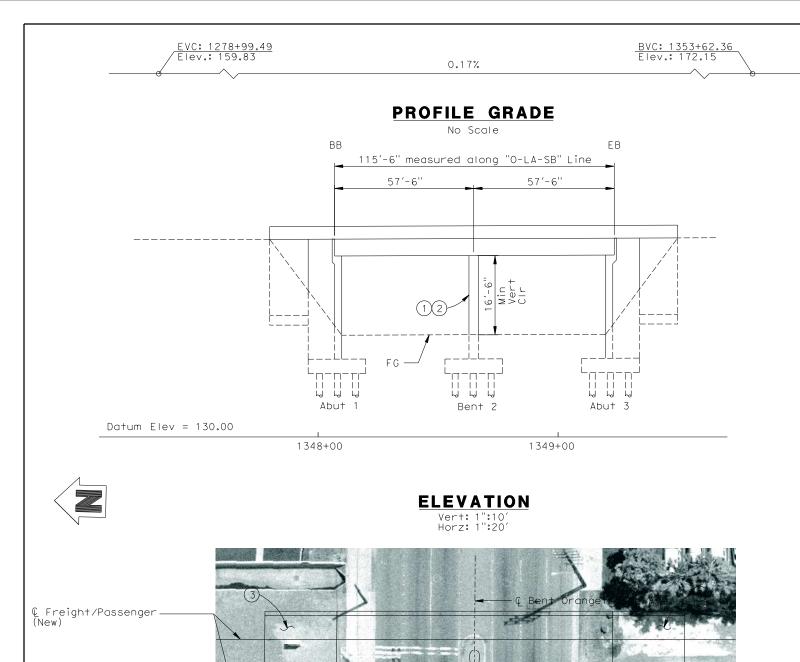


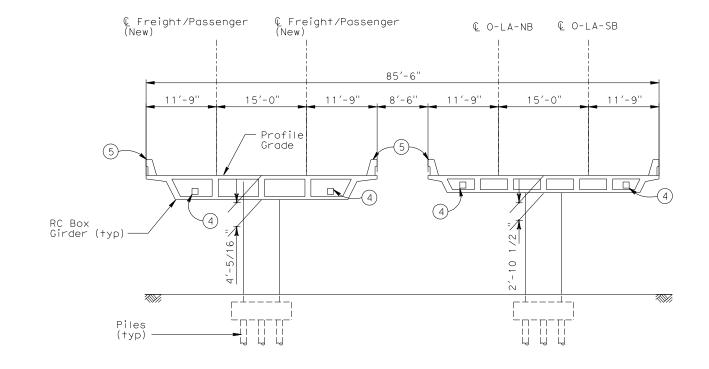










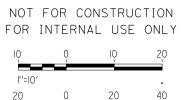


TYPICAL SECTION

1/8 ":1

<u>NOTES</u>

- 1) PAINT "ORANGETHORPE AVE. UC"
- (2) PAINT "BRIDGE NO. 00-0000"
- 3) STRUCTURE APPROACH SLAB
- 4) FUTURE UTILITY OPENING
- 5) GUARDRAIL/ACOUSTIC BARRIER
- INDICATES POINT OF MINIMUM VERTICAL



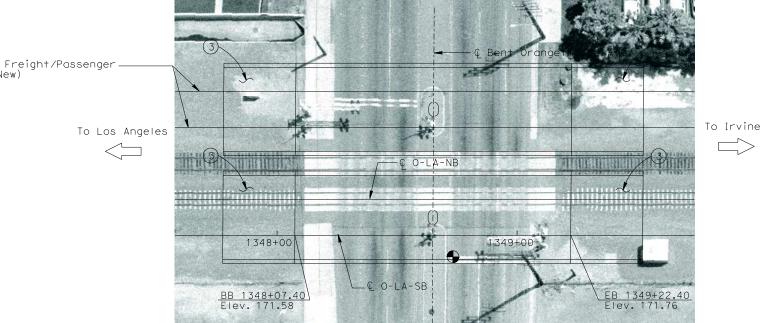




BASELINE ALIGNMENT

ORANGETHORPE AVENUE UNDERCROSSING

HSR06-0005							
DRAWING NO.							
S0400							
SCALE							
A	٩S	SHC	WN				
SHEET N	0.						
23	7	OF	245				



PLAN 1":20'

STV Incorporated

BRINE ESTAMONITE CTS PR. MARKET CONSTRUCTION MANAGERS
1055 MEST SEVENTH STREET, SUITE 3150
LOS ANGELES, CA 90017-2556

DESIGNED BY W. H-H CHU

CHARGE

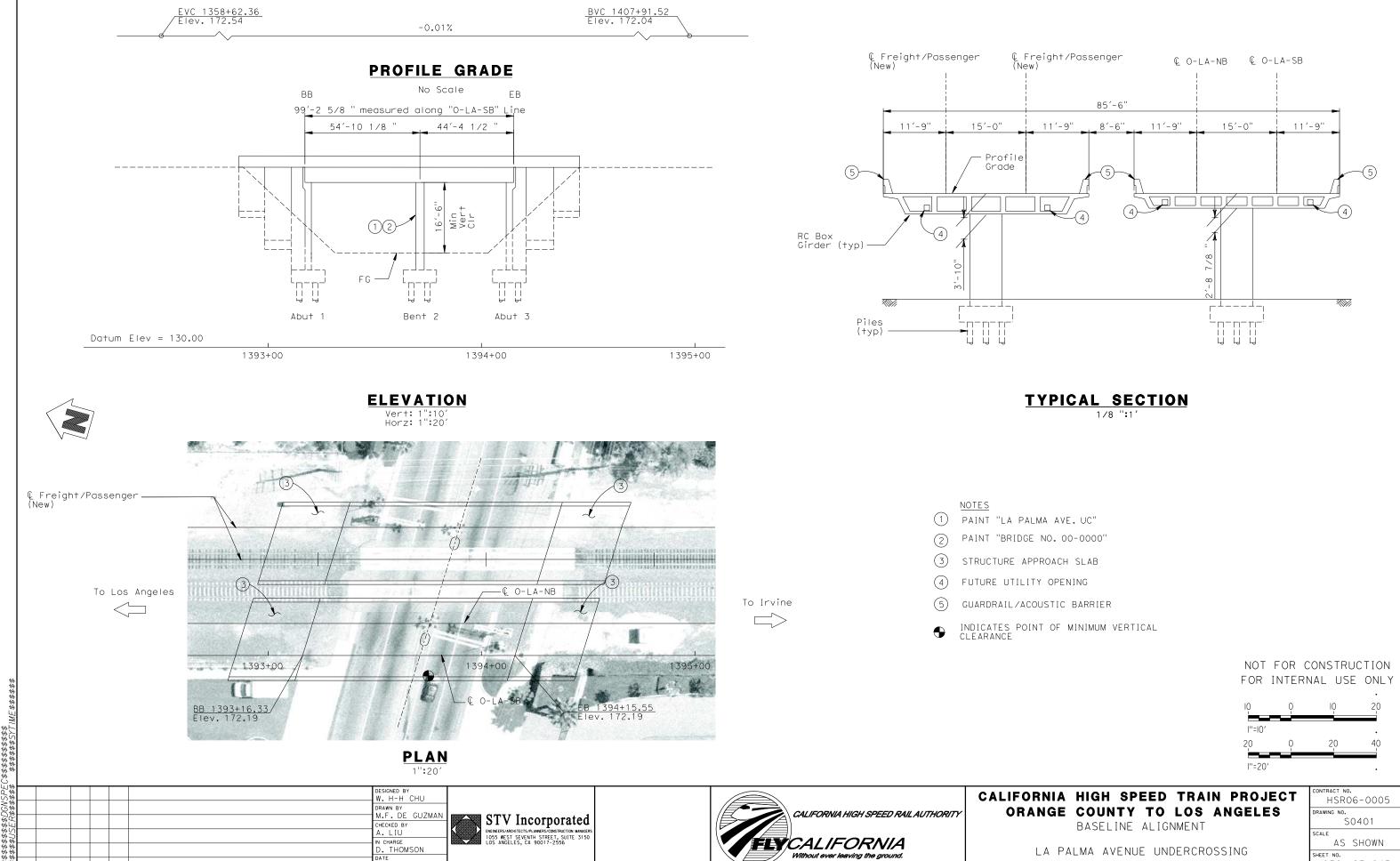
02-13-09

CHECKED BY A. LIU

DESCRIPTION

REV DATE BY SUB APP

DRAWN BY M.F. DE GUZMAN



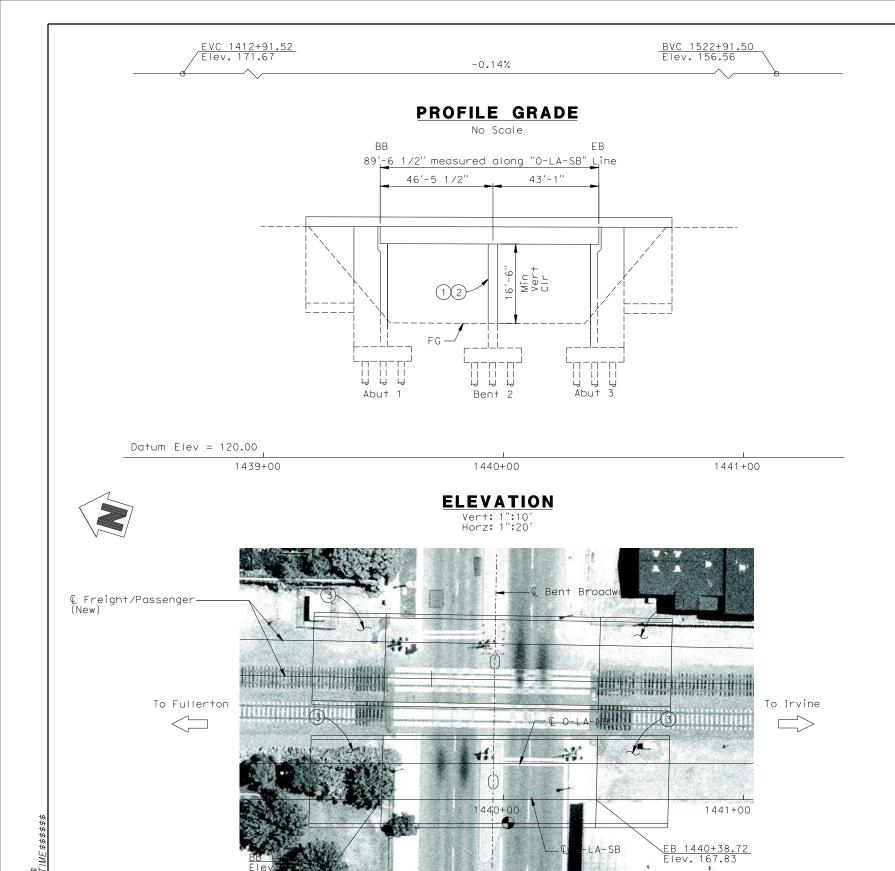
LA PALMA AVENUE UNDERCROSSING

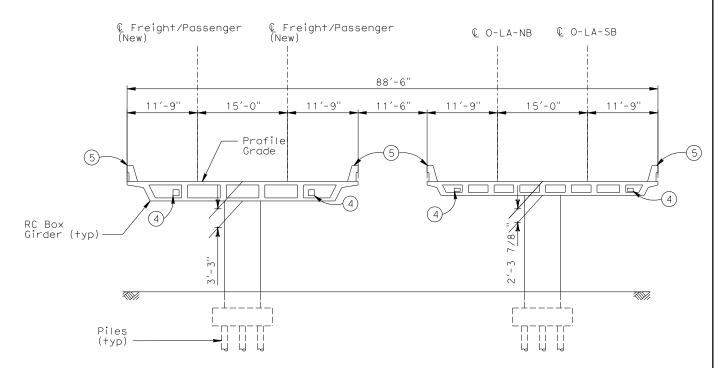
SHEET NO. 238 OF 245

REV DATE BY SUB APP

DESCRIPTION

02-13-09



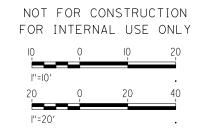


TYPICAL SECTION

1/8 ":1

<u>NOTES</u>

- 1) PAINT "BROADWAY UC"
- (2) PAINT "BRIDGE NO. 00-0000"
- 3) STRUCTURE APPROACH SLAB
- 4) FUTURE UTILITY OPENING
- 5) GUARDRAIL/ACOUSTIC BARRIER
- INDICATES POINT OF MINIMUM VERTICAL



						DESIGNED BY W. H-H CHU
						DRAWN BY M.F. DE GUZMAN
						CHECKED BY
						A. LIU IN CHARGE
						D. THOMSON
REV	DATE	BY	SUB	APP	DESCRIPTION	02-13-09



PLAN

1":20'



CALIFORNIA HIGH SPEED TRAIN PROJECT ORANGE COUNTY TO LOS ANGELES

BASELINE ALIGNMENT

BROADWAY UNDERCROSSING

CONTRACT NO. HSR06-0005
DRAWING NO.
00.02
SCALE
AS SHOWN
SHEET NO.
239 OF 245

